

THE
Penn Monthly,

DEVOTED TO
Literature, Art, Science and Politics.

VOLUME III.

January to December, 1872.

PHILADELPHIA.
UNIVERSITY PRESS COMPANY, 506 WALNUT STREET.
1872.

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THE PENN MONTHLY.

JANUARY, 1872.

FRANCIS DANIEL PASTORIUS.

WHEN William Penn, in the course of his missionary tour through Germany, during the summer of 1677, came to Frankfort-on-the-Main, he formed the acquaintance of several persons, whose religious tenets and fervent piety seemed to chime in with his own ideas of Christianity. Of these, two only are mentioned by name in his diary, viz.: Miss Eleonora Johanna von Merlau, subsequently married to the famous Chiliast, Dr. J. W. Peterson, and Van de Walle, a merchant. From other sources we know that these German friends of Wm. Penn belonged to the circle of Dr. Spener, the famous founder of Pietism, holding their meetings in the Saalhof of Frankfort. Again, we learn by a casual remark which occurs in Pastorius' manuscripts, that the project of forming a German settlement in Pennsylvania was first entertained by the pious men and women who gathered around Dr. Spener at the Saalhof, and that thus originated what is called the Frankfort Land Company. This association bought of Benjamin Furly, Penn's agent, in Amsterdam, five full shares, amounting to 25,000 acres of land.

The beginning of German emigration to America may thus be traced to Wm. Penn's direct and personal influence with a class of pious enthusiasts, who became interested in his reformatory schemes. Now, whatever may have been the first design of the members of the Frankfort Company they themselves did not emigrate. The real settlers on the company's property came from

Griesheim (Krisheim, as it is spelled in older documents), Mühlheim, Crefeld, and various cities or villages of the Palatinate, where Wm. Ames, George Rolfe and Wm. Penn had gained adherents to the doctrine of the Quakers. The first settlers were then originally tenants, paying a certain ground rent to the owners of the land, the members of the Frankfort Company. Under these circumstances it was indispensable for the latter to accredit a capable and trustworthy agent in Pennsylvania to transact their business and to represent their interests.

Now, it happened quite opportunely that at the very time when their plans were maturing (1682) a young lawyer of their acquaintance, who had been traveling for the last two years, returned to Frankfort, a man eminently fitted for the responsible position, if he could only be induced to accept it.

This was Francis Daniel Pastorius. The scheme had hardly been mentioned to him when he was all aglow with it. "To lead a quiet, godly life in a howling wilderness," as he expresses himself, was much more attractive to a man of his earnest convictions than to remain in contact with the "European vanities that he had seen and tasted to surfeit."

Of Pastorius' previous life we are enabled to give a succinct account drawn from an autobiographical memoir. He was born at Sommerhausen, in Frankenland, on the 26th of September, 1651. His father, Melchior Adam Pastorius, must have stood very high in the esteem of the people of Windsheim, which he had chosen for his residence, as he was elected to numerous offices of trust and responsibility. After having been superintendent of schools, mayor and judge of the highest court, he retired at the advanced age of 78 years from public life, and enjoyed in a villa, near Nuremberg, *otium cum dignitate* during the rest of his life.

His son, Francis Daniel, the subject of this sketch, received an excellent classical education at the Gymnasium of Windsheim. The head master, Tobias Schumberg, a Hungarian, could not speak German fluently, and insisted on the boys conversing with him in Latin. At the age of 17, young Pastorius entered the University of Altorf (discontinued since 1809), where, in the year 1600, the famous Wallenstein had attended law lectures and sown his wild oats. From Altorf, Pastorius went (1670) to Strasburg, there to continue the study of law; and with a like

purpose he visited, during the following years, Basle and Jena. At Ratisbon, the seat of the Imperial Diet, he obtained a practical knowledge of public law. Thus imbued with all the lore of a learned jurist, he successfully passed his examinations, and after a public disputation "*pro gradu doctorali*," he received the degree of *doctor utriusque juris* at Nuremberg, November 23, 1676.*

Between the time of his graduation and the spring of 1679, Pastorius stayed at Windsheim, where his father lived. As William Penn, during his journey through Germany, in 1677, did not stop at Windsheim, the acquaintance of these two men does not seem to date so far back.

In 1679, Pastorius removed to Frankfort-on-the-Main, there to practice law. In addition to his ordinary duties, he also delivered lectures to some young Patricians on topics connected with his profession.

It was at this time that Pietism began to attract considerable attention. Dr. Spener, the originator of the movement, was minister at the main church of Frankfort. To awaken a deeper interest in religion he began to hold meetings of laymen for prayer and edification—the famous *Collegia pietatis*. Pastorius, sincerely yearning after a religion that would reach his heart, and disappointed at the cold lip-service of most churchmen, readily gravitated toward Spener's earnest and impressive reform.

But their pleasant intercourse was not to continue long. "In 1680," he relates in his English version of the incidents of his life, "upon the recommendation of Dr. Spener (that brave patriarch of the Pietists) I undertook to be a guide to a noble young spark, called Johannes Bonaventura von Rodeck, in his travels through Ireland, England, France, Switzerland, &c. This occupied two years, and on my return to Frankfort, in 1682, I was glad to enjoy the company of my former acquaintances and Christian friends, rather than to be with von Rodeck, feasting, dancing, &c. There

*Though Pastorius was, on the whole, of quite a sober and almost sombre cast of mind, he did not altogether lack a vein of humor and pleasantry. There is some waggishness lurking through several of the theses, which he proposed to sustain in his disputation. The second of them reads: "*Adolescens qui invita virgini osculum infigit, actione injuriarum non tenetur*;" and the third: "*Pactum ut uxor imperio et dominatione gandeat nuptiarum contractui adjectum Naturæ refragatur et contra bonos mores est.*"

assembled together in a house called the Saalhof, Dr. Spener, Dr. Schütz, Notarius Fenda, Jacobus Vandewalle, Maximilian (by-named the Pious) Lurfner, Eleonora von Merlau, Maria Juliana Baurin, &c., who sometimes made mention of Wm. Penn, of Pennsylvania, and showed me letters from Benj. Furly, also a printed relation concerning said Province.*

Finally, the secret could not be withheld from me that they had purchased 15,000 [this should be 25,000] acres of land in this remote part of the world.

Pastorius then continues to relate that after having obtained the consent of his father (and with it a present of 250 rixthalers), he paid a parting visit to his friends in Griesheim, Cologne, Crefeld, &c. In Cologne a certain Docenius, mentioned also in Wm. Penn's travels, expressed a desire to accompany Pastorius to America. But his wife would not consent, saying that there (at home) they were carried in a coach from one door to another, but she was afraid if she should come hither (to Pennsylvania) she must look after the cattle and milk her cows. The friends whom he saw in Griesheim, Peter Shoemaker, Gerhard Hendricks and Arnold Cassel, and those of Crefeld, D. Kunders and the three Op de Graeffs, followed him to America in the same year. He embarked in London about the beginning of June, 1683, on the *America*, Capt. Wasey, and arrived in Philadelphia, after a somewhat venturesome journey, on the 20th of August.

There came by the same trip of the *America*, another man of note, the Welshman, Thomas Lloyd, subsequently President of the Provincial Council. The two congenial spirits were soon in close communion with each other, carrying on their conversation in Latin, which as Pastorius remarks, Lloyd pronounced in the German way. The friendship thus formed during their protracted passage, continued through life, and so deep and abiding was Pastorius' veneration for his friend, that twenty years after Lloyd's death, he wrote to his three daughters, Rachel Preston, Hannah Hill, and Mary Norris, a memorial letter in glowing words of eloquent affection and gratitude.†

*Perhaps the German pamphlet concerning Pennsylvania, published at Amsterdam, 1681, of which there is a copy in the Loganian Library.

†It contains the following passage: "Thanks to the Almighty for his innumerable blessings, above all for that instant wherein I resolved to exile

Soon after his arrival in Philadelphia, Pastorius called upon Wm. Penn, by whom he was very kindly received. "The Governor," he relates (in the *Description of Pennsylvania*, p. 37), "frequently invites me to dinner, and entertains me with his edifying discourses. Recently, when I had not seen him for a week, he came himself to pay me a visit, and insisted that I must dine with him twice every week. He assured his counselors that he liked me and the Germans very much, and urged them to do the same." With Wm. Penn's secretary, Philipp Theodore Lehmann (erroneously called in the *Description of Pennsylvania*, Johann Lehenmann), he became quite intimate.*

Watson, in his *Annals of Philadelphia*, tells of the rude dwellings called "caves," in which many of the first immigrants sought refuge till better accommodations could be procured. Pastorius took the change from his convenient quarters in old Frankfort to such a primitive structure, quite good humoredly. To be sure, his "house" was only 30 by 15 feet, and as glass was very scarce, the light of day was admitted through oiled paper, but he wrote cheerfully over his door: "*Parva domus sed amica bonis; procul-este prophani*," a sentiment which Wm. Penn appreciated with a hearty laugh.

The original thirteen families who came from Germany and Holland, intending to settle on the land of the Frankfort Company and of a similar one formed at Crefeld, arrived at Philadelphia, on the 6th of October, 1683. Their names were the following: Dirck op den Graeff, Herman op den Graeff, Abraham op den Graeff, Lenert Arets, Tunes Kunders (Conrads), Reinert Tisen (Tyson), William Strepers, Jan Lensen, Peter Keurlis, Jan Simens, Johannes Bleickers, Abraham Tunes and Jan Lücken, (Lukens).

Immediately after their arrival, the location of a portion of the land, to which the above named companies were entitled, was taken in hand. There appears to have been an understanding,

myself in Pennsylvania. He, the greatest Jehovah, not only preserving me in my last journey, but also by his singular good Providence allotting your ever beloved father to be my ship-mate, a blessing and favor of Heaven, which I know myself incapable sufficiently to acknowledge.

*The name is variously misspelled in the Colonial Records, *e. g.* Philip Thomas Lenmar and Ph. Thleman.

that this land should be situated on a navigable stream. At first a tract above Schuylkill Falls was offered to the immigrants, but as, upon investigation, this proved to be too "mountainous," a warrant for the ground where Germantown now stands, was accepted. Pastorius states that their land, as first surveyed, extended to the Schuylkill, but that upon a subsequent survey by Thomas Fairman, about 1,000 acres, giving them a border on the river, were, in spite of their remonstrance, cut off. When the "German township" was again surveyed on the 29th of December, 1687, it was found to contain 5,700 acres, and these were divided into 55 lots. Of these 5,700 acres, only 2,675 belonged to the Frankfort Company, 2,675 belonged to the Crefeld land association, 200 to Pastorius and 150 to Jurian Hartzfelder, a gentleman who had been in the land before Penn. The whole of the land forming the "German township" was laid out in four villages, viz.: Germantown, Crisheim, Sommerhausen (Chestnut Hill) and Crefeld, containing respectively 2,750, 884, 900 and 1,166 acres of land.

Many of the foregoing facts have been culled from a memorial, written by Pastorius himself, in German, on the first leaves of the Real Estate Records (*Grund und Lagerbuch*) of Germantown, now in the Recorder's Office at Philadelphia. The paper contains much other valuable information on the first settlement of Germantown.* For our present purpose, however, it will suffice to quote the introduction to that document, as it is eminently characteristic of Pastorius' warm feelings, and a curious relic of olden times. Opening the large folio blank-book, which was to show the real estate transactions of his countrymen in their new settlement on this side of the ocean, he was so overcome by the solemnity of the moment, that after transcribing a number of appropriate Scripture passages (*Prov. xx., 26; Deut. v. 21, etc.*), he unburdened himself by the following pathetic apostrophe, addressed to generations yet unborn, and written—as might be expected of him when emotionally excited—in Latin:

*A set of town maps, showing the situation and extent of the original lots, with the names of the owners, and other details of an interesting character, was furnished by Matthias Zimmerman, in 1746. There are several excellent copies of Zimmerman's manuscript: one owned by Mr. B. Lehman's widow; another by Dr. P. Keyser, both of Germantown.

Salve Posteritas!
 Posteritas Germanopolitana!
 et ex argumento insequentis paginæ
 primitus observa
 Parentes ac Majores Tuos
 Alemaniam
 dulce solum, quod eos genuerat alueratque diu
 voluntario exilio deseruisse.
 | : oh! Patrios focos! : |
 ut in silvosa hac Pennsylvania
 deserta solitudine
 minus solliciti
 residuum Ætatis
 Germane h. e. instar fratrum
 transigerent.
 Porro etiam addiscas,
 Quantæ molis erat
 exantlato jam mari Atlantico
 in Septentrionali isthoc Americæ tractu
 Germaniam
 condere gentem.
 Tuque
 Seres dilecta Nepotum!
 ubi fuimus exemplar hoenesti,
 nostrum imitare exemplum.
 Sin autem a semita tam difficili aberravimus
 Quod pœnitenter agnoscitur,
 Ignosce
 Et sic te faciant aliena pericula eautam.
 Vale Posteritas!
 Vale Germanitas!
 Æternum vale!

—F. D. P.

The trials and disappointments of pioneer life were quite severe. Not only were many of the colonists of Germantown so discouraged that it required William Penn's personal efforts and kind advice to induce them to stay, Pastorius himself appears to have at first somewhat faltered in purpose, for he says, in verses that allude to Lloyd:

"'Twas he and William Penn that caused me to stay
 In this then uncouth land and howling wilderness,
 Wherein I saw that I but little should possess;
 And, if I would return home to my father's house,
 Perhaps great riches and preferments would espouse."

"Turn wherever you please," he remarks in a letter written

home, the word is: *Itur in antiquam sylvam*—everything is overgrown with woods. 'I often wished I had some dozen of stout Tyrolese, to knock down the big oak trees. But all this we have been compelled gradually to do ourselves.'

The letter containing this passage, is printed in the "Description of Pennsylvania, situate on the confines of the West World," Frankfort and Leipsig, 1700; a book which bears Pastorius' name on the title page, but which is merely a collection of letters and other papers, given in print by Pastorius' father. News from America were then scarce and eagerly sought after; even the printer shares in the excitement, and assures the kind reader that the writer of those letters, "the son *Melchioris Adami Pastorii* is yet actually living in Pennsylvania.

The book supplies fewer tangible facts than we might expect to find, but it is quite attractive from the *naïveté* of its statements. Very much is made of the Indians. Of course everybody in Germany wanted to know about the savages, how they live, how they eat, how they pray, how they dress and how they marry.

Pastorius was, on the whole, very favorably impressed by the Indians. He states the remarkable fact, that they worked for wages. "Meantime we use the wild men as day laborers, gradually acquire their language and make them acquainted with the teachings of Christ."

The following, written in 1684 with charming unconcern, must have caused among his friends what we now call a sensation: "I was the other day at the table of our Governor, Wm. Penn, and met there a wild king. Wm. Penn told him that I am a High German, coming from parts most distant from them. A few days afterwards, he came with his queen to Germantown to pay me a visit. I treated him and his people to the best of my power with food and drink, whereupon they evinced considerable attachment towards me and called me 'Carissimo,' which means brother."

In another letter he informs his friends, that the little Indians are born with a light complexion, but being greased by their parents, and exposed to the sun, turn brown; a notion which, even before Pastorius, was promulgated to the world by Gabriel Thomas in his Account of Pennsylvania, p 46.

But what is most striking in P.'s delineation of Indian character, is the often repeated eulogy of the Indian's natural piety. Again and again he dwells upon the fact that the Indian shames the "mouth-Christian" by the sincerity of his religious belief and the correctness of his moral conduct. Describing the frugal meal that satisfies them, pumpkins without butter or spice, the bare ground for a table, shells for spoons and leaves of the forest for plates, he winds up by exclaiming: "And these wild men, who never in their life heard Christ's teachings about temperance and contentment, herein far surpass the Christians."

And ten years after his arrival he still praises the "gentle savage" for all kinds of moral graces. "They live far more contented and unconcerned for the morrow than we Christians. They do not overreach in trade. They know nothing of our everlasting pomp and stylishness. They neither curse nor swear, are temperate in food and drink, and if any of them get drunk, the mouth-Christians are at fault, who, for the sake of accursed lucre, sell them strong drink."

Again, he wrote in 1698 to his father, that he finds the Indians reasonable people, willing to accept good teaching and manners, evincing an inward piety toward God, and more eager, in fact, to understand things divine, than many among you who on the pulpit teach Christ in word, but by your ungodly life deny Him.

It is evident Pastorius holds up the Indian as Nature's unspoiled child to the eyes of the "European Babel," somewhat after the same manner in which Tacitus used the barbarian *Germani* to shame his degenerate countrymen.

There is little doubt but that his admiration of the gentle savage, the almost Christian of the woods, was somewhat enhanced by polemical feeling toward the orthodox of unregenerate heart. There was no love lost between the Pietists and the Regulars, and though Pastorius since, or soon after, his arrival in America, was identified with the Quakers, this consummation of apostasy only widened the gap between him and the old-school Protestants. Hence a fling at the latter in assigning to them a place below the Indian in the scale of actual piety, was but a fair return for the unsparing abuse which the dissenters received, though, at the same time it was, without doubt, the frank avowal of honest opinion.

(TO BE CONTINUED.)

NOTES IN CLASS.

SYSTEM OF DESCARTES.—FIRST PAPER.

IN the history of the third or modern period, in its first epoch, that of rise, we have traced empiricism, as represented in Bacon and Hobbes. In the same epoch of the same period, the second great system is that of philosophical rationalism. The great master in this system is Descartes. He rested his philosophy upon rational speculation rather than upon external experience—upon the mind's observation of itself in its necessary operations; and this feature gives its name to the system. Rationalism divides itself into two forms, dualism and monism. In the dualism of Descartes the opposition between the subjective and the objective is retained: in it, spirit is a real essence, and matter is a real essence: *two* essences, hence dualism. Monism, under the same general system of rationalism, is represented by Spinoza. He attempted to establish an absolute unity on the basis of absolute realism or pantheism. What is, is real. The real is God. We shall treat, therefore, first, of dualism or dualistic realism; and, secondly, of monistic realism.

DESCARTES, BORN 1596, DIED 1650.

We will classify the three main divisions of the philosophy of Descartes under the letters A, B and C.

A. I. That philosophy may be established as a true science, it is necessary that we should proceed from some principle, which is primarily and immediately certain, *i. e.*, certain without medium or intervention of any other principle, all extrinsic things meanwhile being left in doubt. This is the principle of methodic or provisional doubt, and is totally distinct from skeptical doubt, which is an end, not a means. As the motto of Anselm was: "*Credo ut intelligam*:" I believe in order that I may understand," so the motto of provisional skepticism might be, "*Dubito ut credam*:" I doubt in order that I may believe."

The extent to which Descartes carried this provisional doubting, he expresses in his first philosophical publication, his "Discourse of Method," written in French, which appeared in 1637. He says: "Seeing that our senses sometimes deceive us, I

am willing to suppose that this is not a solitary thing, such as they lead us to imagine; and as men err in reasoning, and fall into paralogism about the simplest things in geometry, I judged that I was as open to mistake here as others. I rejected as false all the reasons which I had formerly regarded as demonstrative; and in fine, noting that we may have in our sleep the very same intellectual impressions and convictions which we have when we are awake, and which yet are deceptive, I resolved to put my waking thoughts on the same level of uncertainty as my dreams.”*

II. Such a principle is consciousness, or the act of the soul conscious of its own thoughts, and, consequently, of itself a thing existing. “I am thinking (*ego cogito*), therefore I am (*ergo sum*).”

“But in the very act of wishing to think that all other things were false, it was impossible for me to doubt that I, who was thinking, was some thing (*quelque chose*) [Latin: I could not at all doubt that I myself was, at the time]; and remarking that this truth, ‘I am thinking, therefore I am,’ (*je pense, donc je suis—ego cogito, ergo sum, mihi existo*), is so firm and sure, that the wildest extravagances of the skeptic cannot overthrow it, I judged that I could, without scruple, lay it down as the primary principle (or foundation) of philosophy, for which I was seeking.”

From this principle he deduced another, which is, that whatever is clearly included in the idea of anything, is to be affirmed of that thing, *i. e.*, granting the idea, we grant whatever it fairly includes. The process of Descartes was as follows: I am doubting, therefore I am thinking; I am thinking, therefore I am. And in this he held that he had grasped both a fact and a principle; the fact, *i. e.*, doubt, thought, existence; the principle, *i. e.* the relation of doubt to thought, and of thought to existence. “That cannot doubt which does not think, and that cannot think which does not exist. I doubt, I think, I exist.” He affirmed thinking as contained in doubting, and existence as contained in thinking; and hence made the universal deduction that everything is to be affirmed, that is thus embraced in the idea: hence—

*For the French, *Ouvres (Aimé-Martin)*, Paris, 1854, p. 43. Cousin, (Par. 1824), I, 157; for the Latin, *Amstetodam*, 1685, p. 20. The Germ. transl. ed. by Kirchmann, p. 45. Eng. transl., 3d. ed., Edinb., 1866, pp. 74-75.

III. The soul, whose existence necessarily is involved in its thinking, is an entity, existing *per se*; it is substance; is distinct from external things, and independent, inasmuch as, if these things did not exist, it would be, and would think. "I am a thinking thing (*res cogitans*), i. e., I am a mind (*mens*), or soul (*animus*), or intellect (*intellectus*), or reason (*ratio*).'" The thinking thing is a thing that doubts, understands, affirms, denies, desires, rejects, imagines, and perceives.

IV. The mind knows itself as subject to doubt, limited and imperfect. In this is involved that it has an idea of being, or a being not subject to doubt, not limited, not imperfect, hence of an absolutely perfect being.

V. This idea cannot be the *product* of the soul itself, as it is an imperfect substance; hence, it is innate to it. This conception of innate ideas is one of the great determining ones in philosophy.

For philosophical rationalism, which recognizes reason as one primary source of our cognition as not merely a worker on material furnished to it, but as the furnisher itself of the most important material; as not merely the passive recipient, but the actual giver—in a word, not simply as a something to be furnished with knowledge, but a higher something which furnishes knowledge, and with it moulds the perception, as the bee which gathers material constructs it into honey, and all the flowers of the world would not furnish a drop of true honey were there no bee. The mind finds always in observation the occasion of its activity, but not the proper cause; it is rather, indeed, a *causa sui*, without which all external to itself could never become an occasion nor be observed. It is not the mere paper to be written on, nor the mere pen, the instrument of writing, but the essential power which uses and indeed needs the pen and paper to produce the writing, but writes with the one on the other—uses the senses as the organ with which it furnishes the understanding. It is the *intellectus ipse*, without which *quod ante fuit in sensu* would have had no "*sensus*" to be in. In a word, it is the reason which gives all the intellectual relations to the senses, and the motto of the school of rationalism might be "*Nisi sit intellectus nihil esset in sensu, et sensus ipse non esset.*"

VI. But this idea in the soul could not be innate to it unless it

were given by that Being Himself who is absolutely perfect ; therefore a being absolutely perfect necessarily exists. Descartes, reasons in the same way in his third Meditation ; but in answering objections urged against him, in stricter conformity with the principle laid down by him, that we are to affirm of a thing what is clearly contained in the idea of it, he draws from the idea itself, if a most real thing, the inference that it actually exists. He thus revives in substance the argument of Anselm, which because of its importance in the history of philosophy we will present in a literal translation of Anselm's words : "Therefore, O Lord, we believe that thou art something, than which nothing greater can be thought. Is there, therefore, no such nature, because the fool hath said in his heart there is no God : yet surely, even that fool when he hears me speak of something, than which nothing greater can be thought, understands it, and what he understands is in his understanding. But, surely, that thing, than which nothing greater can be thought, cannot be in the understanding alone ; for if it were in the understanding alone it would be possible to think of it as in real existence, which would be a greater thing. To assume that the greatest thing thinkable is in the understanding alone, is to admit that there is a greater thing thinkable than the greatest, which is absurd : hence there exists, beyond doubt, something than which nothing greater can be thought—exists both in the understanding and in fact." This renowned argument, first stated by Anselm, and renewed, hardly with entire independence, by Descartes, who was too well educated not to have known so familiar a piece of reasoning, has been very differently regarded. It has been considered by some as simply a very subtle sophistry. Ueberweg says : "Descartes' promises only justify the conclusion logically, that if God is, He has existence, and if God be imagined, we must imagine Him as existing. Descartes' form of the ontological argument has also a defect, from which that of Anselm is free. Descartes speaks of existence as belonging to the perfections as if it were one predicate involved with others ; while Anselm designates as the more perfect something a particular form of existence, to wit : that which is not merely in our spirit, but outside of it." Among the defenders of the argument, with the mighty names of Anselm and Descartes are associated those of Wolff, Moses Mendelssohn the greatest speculative thinker of this century,

Hegel himself says: "It would betray the greatest lack of thought if it were supposed that existence itself is united in our consciousness with the conception of finite things, in the same way that it is with the conception of God. Such a thought would involve forgetfulness of the fact that finite things are changeable and passing away; that is, that existence is united with them only transitorily—that this union is not eternal but separable. Hence Anselm was right in declaring that only that is perfect which *is*, not merely in a subjective way, but *is*, in an objective way also. All affected superiority directed against the so-called ontological proof, and against this definition of the perfect by Anselm, is of no avail, for it lies in the unperverted soul of every man, and to philosophy itself it comes back unconsciously and involuntarily." The result may be summed up in the proposition that, on a full knowledge of the postulates of its own consciousness and of what is involved in the appeal made to it in the external world, it is connate, if not innate to the unperverted soul, to recognize a supreme perfect being.

VII. Moreover, a being absolutely perfect, of necessity, excludes all limits and all imperfections; therefore, a being absolutely perfect, that is, God, cannot be a body, but is an infinite spirit, of whom the human soul is an imperfect image. It is impossible here not to be struck with the loftier range of Descartes' thinking as contrasted with the crudity and coarseness of Hobbes, who did not hesitate to affirm that to think of God is to think of Him as corporeal.

VIII. But God, the sufficient reason of all things, is also the principle of Truth. For human knowledge by which, however clear and distinct, man might be misled (if God were not true) by God himself or by an evil spirit, can become absolutely certain through God alone as true; as in view of his veracity and immutability, it is impossible to suppose either that he deceives man, or is willing that he shall be deceived. Descartes has been charged here with begging the question, by assuming the veracity of God without laying down a principle by which the veracity can be established. But this has been laid down in the whole proof, that there is an absolutely perfect being. Even if it be said that the absolute perfection of the God reached by Descartes' processes is simply a perfection of the natural attributes, the mind irresist-

bly accepts the moral attributes as necessarily associated with the natural. It is safe to assume, even in regard to man, that, in his normal condition, he will not lie without motive; and the being absolutely perfect in his natural attributes, could have no motive for falsehood. Wisdom is a natural attribute, and falsehood conflicts with wisdom. "Thought, resolving itself in the last analysis into the idea of the supremely perfect and supremely true being, excludes the possibility of such an external illusion. Just as primitively the idea of thinking, resolving itself into that of existence, excludes purely internal doubt."

IX. That we are, in fact, often deceived, has not God as its cause. Our errors depend upon our will, not upon our understanding. The defect is in our action, or use of liberty, not in our nature.

B.—THE DOCTRINE OF SUBSTANCE AND MATTER.

I. That which truly is, is substance, that is, being which requires no other being in order to its subsistence.

II. Hence, too, there is but one absolute substance, *i. e.*, God; as He alone needs absolutely no other being that He may exist.

III. The world, however, consists of imperfect substances, inasmuch as they need God in order to exist and subsist.

IV. These substances are either simple or extended. The simple are spirit, the extended are matter; they, in their attributes, are essentially opposite.

V. As material or corporeal substance and its extension are one, so the universe of bodies, the visible world, is not distinct from space as total, and hence is illimitable, and, if not infinite, is at least indefinite, as is the space it fills. Time, space and number were held by Descartes not to be objective qualities, but simply modes of thinking.

VI. Matter is everywhere; so that even the spaces between the heavenly bodies are filled by a most subtle ether, by whose vortices or revolutions the stars and planets are agitated, and, in continual rotation, circle around the sun.

In these views Descartes repeats Giordano Bruno, as Bruno in part repeats Democritus and the "Academy."

VII. This ether was, indeed, primarily put in motion by God;

but, the motion once established, all the rest of the operations of nature can be explained by the laws of mechanics.

There are no atoms, that is, parts of matter indivisible in their own nature; for as extension is the essence of matter, no matter, however small, can as such be unextended; hence, matter is infinitely divisible.

To this theory, the following objections may be made:

First. That it confounds mental or mathematical division with real division. We admit the former: we deny the latter. A mathematical unity has, as such, two halves; but a physical something, and yet more a metaphysical something, has not of necessity halves.

Second. A composite something involves the idea of a simple, and a divisible the idea of an indivisible. Hence, on Descartes' own theory that we may affirm of a thing whatever is involved in its conceded idea, indivisible and divisible involve each other.

Third. "The finite is not capable of the infinite." Really infinite parts would involve a really infinite whole.*

Fourth: All unity, as mathematical, is precisely the same. The word "one," when it qualifies "universe," means precisely what it means when it qualifies "animalcule." But each thing that you can call "one," is not the same as each other thing that you can call "one." One is one; but one one thing is not the same as another one thing.

Descartes further affirms that matter is one and the same, essentially, throughout the universe; that is, it is movable and capable of all the effects which arise from the motion of parts. Every *variation* of matter and diversity of its form depends on motion. There can be no change without motion, no motion without change.

VIII. Hence it betrays arrogance to attempt to inquire into final causes. There is, indeed, not according to Descartes but according to some of his followers, now no proper *cause*, as dis-

*Infinities differ ideally. An infinite series of thousands is as such, in the terms of the statement, a thousand times greater than an infinite series of one. Yet it is in fact but a series of one; for one is the sole number, and all numbers are but one; and if the series be one of *things*, all infinities of the same class are identical. Thus a concrete infinite series of pounds, and a concrete infinite series of shillings, are *one* and the same thing.

tinguished from *occasion*, or, as we may distinguish, then, between final or essential cause, and intermediate or occasional cause. God alone is the first; creatures can be but the second. The difference between cause and occasion has been illustrated by Joshua's command to the sun to stand still. The final or proper cause of the phenomenon that followed was God's will. The immediate or occasional cause was the word of Joshua. Joshua's word *occasioned* it, God *caused* it. The first may act without the second; the second cannot act without the first.

On this so-called theory of *occasionalism*, the soul does not really move the body, nor the body the soul, nor does one body influence another. The soul by willing, the body by moving, make the occasion on which the first cause, God, produces the effect.

This doctrine, often objected to as one of the most serious falsities in Descartes' system, was never touched by him. It was introduced by Geulinx (1625-1669), and elaborated by De La Forge and others; and while largely adopted by some of Descartes' greatest pupils, has been rejected by many others.

AN ADVENTURE ON THE "CORNICHE."

Ut tu hodie canem et furcam feras.—PLAUTUS.

Who among our readers has had the pleasure of traveling in a *vettura* on the Corniche, or as the Italians call it, the Corniche; or rather in this age of marine and locomotive engines, who has not? This beautiful white and green cornice of the midland sea, used to be a carriage road all along its borders, and for a long time it was the only land route from Genoa to Nice; but the railroad has encroached upon it, leaving only, when we were there, the strip from Savona to Mentone—an easy two days' jaunt—to delight the traveler in the actual journey, and to make pictures in his memory forever after.

Language fails to describe the beauties of that Mediterranean road, hard as a floor, as it winds along the indentations of the

sea, always in sight of it, and much of the time upon it, ten feet only from your carriage-wheels; sometimes it climbs the cliffs and fairly overhangs it; now it passes through rocky scraps, and then plunges into picturesque villages enwreathed in vines filled with rosy and dewy grape-clusters—the *roscida uva* of Virgil in his own land and language. The hamlets are peopled with vine-dressers, in the picturesque costumes of the country. Little black-eyed children, ruddy and strong, follow your carriage literally for miles to beg, and will not down at your bidding. Do not pay them too soon, but let them run, and intone their pretty childish Italian; it gives variety to the route. But ah, the littlest girl begins to flag; scatter your coppers now and disperse the troop; we shall have a new one in a few minutes, for another village is in sight.

Such is the road, from the verdure of the vine to the bald gray cliffs of bold promontories, with the indigo sea on your left, blue beyond belief, and dotted with white and red leg-o'-mutton sails, with here and there a little stream of smoke from some plowing steamer, as she hugs the coast. In fair weather, such as we had, the Mediterranean is as level as a lake—there is no Atlantic swell and not a murmur of the *polyphlosboio thalasses*, but only as the wind raises the ripples the faintest trace of the *anerithmon gelasma*. But pardon the enthusiasm and the unusual quotations, for what has been said thus far has nothing so do with the story, except that the incident happened on this journey. A Frenchman, who was about to listen to the narrative of a circumlocutory friend, was indiscreet enough to suggest—"Bélier, my friend, if it is all the same to you, begin at the beginning." If I have thus far violated this principle, I propose to adopt it now.

A fellow-countryman in a strange land is a boon, and many an ardent friendship has begun in just such a chance meeting. We had found in Florence and were now traveling with Mr. James D. F——, a relative of the Whitneys and Haddocks, and others of the large Fish family of Connecticut—a pleasant, judicious, polite and jovial gentleman, always ready to consult the comfort of his fellow-travelers, and, above all things, of an exceedingly mild and equable temper: mark that! When we reached Genoa, I went with him to the public officer of the *vetturini*, in the Via Annunziata, to bargain for the *vettura*, which we were to find ready

waiting for us at Savona. It was still in April, and the traveling was mostly the other way; and so I was told that the office would be glad to have some counter-travel, in order to get their overplus of horses and carriages back to Mentone. We were to go by rail, you know, from Genoa to Savona, and take the carriages at Savona, but the booking was done in Genoa.

Of all the defrauders of innocent tourists, the Italians are the worst. They have a natural gift that way, and they improve it by education, and by that practice which "makes perfect."

"How much," said I to the greasy official, "for a *vettura* from Savona to Mentone?"

"One hundred and sixty *lire*," was his answer.

"Nonsense; I would almost as soon take the diligence, and I will pay no such price."

Then he stormed and gesticulated—Italians always look as if they were going to tear you to pieces, when they have no such intention; and this fury is, to the knowing traveler, a sign of impotence.

"Well, one hundred and fifty."

"No."

"Then"—more wrath and frantic gestures—"a hundred and forty."

"Now, see here, I will give you a hundred and twenty, and not a *centesimo* more."

He tried a hundred and thirty, and then subsided, as I turned to go away.

"Stop, you shall have it."

So I got it put in detail upon paper, *vettura* and *two* horses, for four persons, myself, my two daughters and Mr. F——.

The next day we started; arrived at Savona, I presented my ticket at the bureau.

"Signor," said the agent, "you should take *four* horses; it will be far more comfortable, and cost very little more,"

"Give me two, and only two."

Again he made an effort; "*Milord* should have four, and so very little more the cost."

"Give me two."

At last a fine carriage drove up with four horses, and the agent gave us a smile, "childlike and bland" (I thank Bret Harte for

that expressive phrase), and said magnanimously, "*Milord* shall have the four horses without extra pay." He was dying to get his four horses back, you see.

I was quite inclined to refuse them, even on these terms, but smart travelers take good care not to spite themselves, and so we accepted the coach and four.

I need not dwell upon the beautiful dioramic visions, the lunches, the white dust. We stopped for the night at *Oneglia*, a miserable hole, a blot on the beautiful *cornice*. Even the guide books give a warning, and say, "Make your bargain beforehand." The landlord of the hotel looked like an old brigand not quite retired from business, and I tried to inform him, by a glance, of my opinion.

We dined late and went to bed to dream of the *Mysterious Castle*, the *Mysteries of Udolpho*, and other similar cheerful stories, but no one was assassinated, or kidnapped.

The next morning we descended to a miserable breakfast, after which we ordered the carriage, and thanked the Lord to be off.

I have always had a fancy for curious walking-sticks; I collect them, and, what is worse, I covet them. It is only my strong innate honesty which would keep me from surreptitiously appropriating a rare specimen, and that would be sorely tempted if the opportunity was as rare as the cane.

Walking-sticks present a theme of immense variety in the literary field; some day I intend to begin to reap it, by giving a description of some of my own. This done, I will search the record of biography and my social circle, for more material; and if the editor of this magazine is the man I think him, its readers may expect a rich treat. There is my Waterloo stick, made out of a (real) shot-broken standard staff of the *Young Guard*. You want to know how I got it? Wait for my article. Then I have a Constitution walking-stick, made when they didn't "tear her tattered ensign down;" a bamboo, the gift of a Chinese mandarin—you think I am bamboozling you; a cypress, from that glorious old grove, under which Montezuma walked, cut by my own hand; my orange wood, curiously carved at top into a monk's head, the face in the wood, and the circle of hair left in the bark, whereby hangs a fearful, thunderous tropical tale. There is a ratan with a *jambe d'actrice*, which I took away for propriety's sake from a fast young

friend. But I must forbear. In brief, were I reduced to want, I should put them up at auction, and introducing my sale by a public lecture on the natural history of walking-sticks, evolving in German fashion the original idea from the depth of my own consciousness, I should retrieve my fortunes, and continue to live a comfortable although a frugal man.

The plot thickens. Mr. F—— had a cane—a beautiful cane—and he was so kind, even-tempered and generous, that the tempting spirit prompted me to try to secure it for my collection. I hoped to get it from him without positively begging it; but if not thus, I would tell him of my collection and solicit it as a donation.

His brother, he said, had just returned from Jerusalem, had cut it with his own hand from some holiest spot, and had taken it to a little bazaar where they polished it and put a Scripture text in Hebrew around it. I would write out the motto, if I thought my readers could understand it, and if it would not look pedantic. The English was "They shall prosper who love thee." What a temptation for a cane-fancier! I had not a Jerusalem stick in my collection. I praised it; I fondled it; but my friend quietly ignored the interest I displayed. "Yes," he said, "I think it a very handsome cane." But when I had the effrontery to ask him for it, he said, "O, it is not mine; it belongs to my brother, and I am only carrying it home for him." After that he always spoke of it as Ben's cane. He really had a brother Ben, I knew.

To return: We had breakfast at Oneglia. The cane was in Mr. F——'s hand during breakfast; but, having to return to his room for a moment, he put it in a corner, and when he came back it was gone! Dire was his consternation; but I leave you to imagine my feelings.

"Doctor, have you seen my cane?"

"No."

Rapid inquiries were made. I began to feel as if I had taken it.

The matter was pressing; the carriage was ready; the baggage on, and we must be off.

It would have amazed you to see the entire transformation in my friend. His sweet temper had departed with his stick. He stormed at the landlord, and threatened instant death to the servants if the cane was not immediately produced. He could

have used the logical argument *ad baculum*, but that the *baculum* was wanting. The crowding Italians kept their temper. They brought him all sorts of old sticks, and one old woman ventured to offer the stick of a defunct umbrella. Finding the *hurricane* of his wrath ineffectual, he at length took his seat in the carriage, rumbling maledictions; but at the last moment he turned to the landlord and said, "I shall remain several days in Nice, and I will give five *lire*" (large money in that country) "to anyone who will send or bring me the cane."

They all smiled placidly, and we took the road; but we had not gone three hundred yards before we heard a shouting behind us, and a man came running at top speed bearing the Jerusalem cane high in the air. Arrived breathless, he demanded his dollar. Mr. F— fumbled in his pocket but had no change, and as we were in a hurry I said, "I have a five-franc piece; shall I give it to him?" In his joy he said, "Yes." I threw it to the fellow. My friend grasped his baton and we tumbled on. Silence for about three minutes, when out spoke my friend:

"Doctor, you ought not to have given that rascal the money. He secreted the cane and then produced it to get the reward."

"But," said I, "you told me to pay him."

"Yes, but I was flustered and didn't think. I wish I had broken his head with it. I would give a dollar if you hadn't given him that."

He looked so sad and stern that we tried to keep from laughing, but it was no go; we began to smile; the smile became a laugh; the laugh a roar; but he did not join in it, but sat in the midst of the peals dignified and gloomy.

We parted at Nice firm friends, and met again in Paris. He never was without that cane. I believe he slept with it until he got it safely back to Brooklyn—*perhaps* to Ben.

I declare that, except on the subject of Jerusalem canes, he is as genial, generous and amiable a gentleman as I ever knew. On that subject he becomes a fury, and I have some doubts whether I will ever show him my collection. However, he is an older man than I am, and I am intriguing with Ben's connivance to get him to leave me that cane by his will, and whenever I show it I will tell its story, with no more embellishment than I have used in this truthful recital.

HENRI DE COISSY.

THE PESTILENCE OF 1793.*

*A pestilence fell on the city,
 Presaged by wondrous signs, and mostly by flocks
 of wild pigeons,
 Darkening the Sun in their flight, with naught in
 their claws but an acorn ;
 And as the tides of the sea arise in the
 month of September,—
 Flooding, some silver stream, 'till it spreads to
 a lake in the meadow.
 So death flooded life, and o'erflowing
 its natural margin,
 Spread to a brackish lake, the
 silver stream of existence.
 Wealth had no power to bribe, nor beauty
 to charm, the oppressor ;
 But all perished alike beneath the scourge
 of his anger.*

—LONGFELLOW.

FEW events have exerted a greater influence in the history of our city than did the pestilence which visited it as last century was drawing to a close. The influence of pestilences and famines in turning the tide of history in new directions has often been observed. The plague that visited Athens, during the administration of Pericles, contributed, in no slight degree, to depose her from her leadership in Greece, and to give the Doric race predominance over the Ionic. Sacred history tells us that at a still earlier date the failure of crops in Egypt transformed the whole social constitution of that country, and that a sudden pestilence or simoon raised the siege of Jerusalem, by destroying the army of Sennacherib. Prof. Seeley, in his study of Roman Imperialism, ascribes the overthrow of the empire by the barbarians to the lack of population, and points to the great pestilence in the reign of Marcus Aurelius as a main cause of the depopulation which exposed that vast congeries of nations to destruction. He traces similar effects of pestilence in the mediæval history of

* A short account of the malignant fever which prevailed in Philadelphia in the year 1793: with a statement of the proceedings that took place on the subject in different parts of the United States. By M. Carey. Fifth edition. Philadelphia, 1830.

Western Europe. "The 'black death' is a turning point in mediæval English history." Less important and notable results followed the pestilence which afflicted our own city, yet they were not wholly unimportant. Up to the close of the century, Philadelphia was the metropolis, as well as the capital, of the nation—a fact still traceable in the plans of western cities that were laid out before that date. Since then she has yielded the place of preëminence to New York, partly, indeed, because the invention of steamships made the position of our sister city a very special advantage, partly because our city fathers adopted a very narrow and short-sighted policy toward various branches of business (auctioneering, &c.), whose possession they regarded as assured to the city; but partly, also, because the material prosperity of our city received a very grave shock through the ravages of "the malignant fever." The movement to transfer the seat of the National Government to the banks of the Potomac was promoted, no doubt, by the same cause. But the effects of the pestilence were not unmixed calamity. That the Quaker City was in a thoroughly filthy condition in 1793, was assigned by the popular mind as a reason for the spread of the epidemic, and, therefore, traditions of municipal cleanliness prevailed here for the two generations that followed. Philadelphia came to be pointed out in all quarters as "a city of clean streets and clean records;" but the third generation seems to have utterly forgotten the lesson. The present writer took a look at some of the dirtiest parts of New York and Brooklyn last summer, but could find nothing to compare with the filth, that it needed no searching to find, in the southern part of our city.

The maglignant fever of 1793 found a faithful matter-of-fact historian in Matthew Carey, who might have put on his title-page the motto, *Quorum pars magna fui*. The worthy Catholic book-seller and book-maker published his pamphlet *Account* in November, 1793, and his preface bears date within a week after the epidemic "had run its course" as some would express it, or as others would say "had been brought under control." A third edition was called for before the month was out, and a fourth in the January following. The fifth appears in his *Miscellaneous Essays*, collected in 1830.

He represents the years that preceded the pestilence as a time of marked prosperity, in strong contrast to the period that imme-

diately followed the Revolution. The colonies, though victorious in the struggle for Independence, came out of it almost ruined; while the defeated mother country was in the hey-day of prosperity. Every one in England that could manage to send a "venture" to America, invested in goods for that market, home production was stopped, and the market "glutted" with unsaleable goods. The articles of confederation proved too loose a bond of union to secure domestic harmony and coöperation between "the sovereign States" that united in framing them. An immense war debt crushed all energies, and the country seemed on the verge of repudiation and bankruptcy. With the adoption of the new constitution in 1789, business at once revived. The Federalist statesmen were sufficiently protectionist in their policy to secure to home manufactures space and time to take root and develop. Alex. Hamilton, by his famous Treasury Report in 1791, sketched out the duty of the nation to her own interests. The tariff duties imposed were heavy enough to meet the demand of the time, when English capital was not yet sufficiently powerful, nor the means of transportation cheap and ample enough to allow of American manufactures being "crushed in the cradle." Philadelphia grew rapidly; street was added to street; rents rose through eager competition to exorbitant rates; property sold at prices often far beyond its real value. The sober citizen began to adopt luxurious manners, to set up his sedan chair, or even his carriage; new and extravagant habits threatened to supersede the old and plain ways of life, as the Timoleons and Brutuses of the daily papers complained with groans.

The origin of the malignant fever of 1793 is curiously connected with the political history of that disturbed period. The French West Indies had shared in the political convulsions of the mother country, and a considerable number of fugitives from Cape Francois reached Philadelphia in July. They were received with the same ready hospitality as had been extended to their own exiled Acadian kindred on a previous occasion, and over sixteen thousand dollars were raised to supply their immediate wants. It was afterward remembered that malignant fever was raging that summer in the West Indies, and some of the fugitives, it was reported, had died of fever on the voyage, and one after just landing. We know now that it is not necessary to suppose that any of the Cape Francois

people were either suffering from the disease or susceptible to it ; that they might very well have brought the infection without being themselves infected. The fever was certainly of a tropical type, accompanied by hemorrhage, vomiting and delirium, and ending fatally in from five to eight days, unless the febrile symptoms gave way on the third or fourth day. The "type" of the disease seemed to vary with the weather, but without any diminution in the mortality with the fall of the thermometer. At first the doctors were totally "at sea" as to the method of treatment, and tried first their ordinary methods in similar cases, and then the treatment recommended by West India doctors, with little result. At last they had to resort to the "heroic treatment," which we generally associate with their honored memories—phlebotomy, jalap and calomel, and they report the results to have been excellent. The druggists were not able to make up each dose separately, so they compounded jalap and calomel in large quantities and furnished it without much attention to the exact proportions prescribed in any particular case—a course not always beneficial to the patient. Dr. Wistar, while himself prostrated by the fever, accidentally discovered—what we believe is now a medical truism, but was then an incredible paradox—the benefit of fresh air and cold drinks.*

The alarm of the magignant fever, was first given in the latter part of August, and at once a general stampede from the city began. It seemed as if whoever could command a conveyance and find a place of refuge, would fly at once. On the 22d, Mâyor Clarkson charged the City Commissioners to take immediate steps to clean the streets, and on the 26th the medical practitioners met in conference to discuss the subject, and proposed various means to diminish the panic, and to prevent the spread of the

*Until a very recent period patients suffering from the typhus fever, which is the scourge of Ireland, were kept in the closest of rooms and debarred from all cooling drinks. The doctors who first introduced the present system narrowly escaped mobbing in many instances. The poet says:

Only alas ! the poor, who had neither friends nor attendants
Crept away to die in the almshouse, home of the homeless.
There, in the suburbs it stood in the midst of meadows and woodlands ;—
Now the city surrounds it ; but still, with its gateway and wicket
Meek in the midst of splendor, its humble walls seem to echo
Softly the words of the Lord :—" The poor ye always have with you."

disease. Among other things, they advised that the ringing of funeral bells be stopped; that the dead be buried very quietly; that fires in the open air be forbidden, as of no prophylactic use; and that a large and airy hospital be at once erected. The Mayor complied with part of these recommendations, but not all, as we find the Governor of the State urging him, on the 29th, to adopt more active measures for stamping out the pestilence. As the month closed, one might have supposed from the number of burials, that the danger was passing away, but the infection continued to spread. The City Alms House on Spruce street had hitherto been relied on as a hospital in case of need, but the managers very properly refused to expose its inmates, numbering between three and four hundred, to the infection.*

Then the circus was employed after a fashion as a hospital, until the people of the neighborhood threatened to burn it down. After conference between the city and State authorities, it was resolved to take possession of the mansion of Wm. Hamilton, Esq., at Bushhill, in the absence of its owner and despite the opposition of the tenant. This was done, August 31.

These first weeks, when the danger was least, were the period of greatest terror. Consternation seized on the whole city, and their faculties seemed to be benumbed by the panic. The air was full of vague and dreadful rumors; dismay and fright were visible on every face. All sorts of preservatives and disinfectants were caught at—garlic, tobacco, camphor, "thieves' vinegar," tarred ropes, nitre, &c., &c. People walked the middle of the street, avoiding the side-walks, and fled at the sight of crape or a hearse; shaking of hands ceased. The coffee house, the Philadelphia Library, most of the city offices, and some of the churches were closed; only a single daily paper—Andrew Brown's *Federal Gazette*—continued publication, and of the seven guardians of the poor only three remained at their post, and for a time took the additional charge of the new hospital. The ties that held society together seemed severed by the strain; public opinion died away, and the greatest cruelty and injustice to the sick passed without a thought of reproof. Wives and husbands, parents and children,

*Longfellow is therefore incorrect in making Gabriel—Evangeline's lover—die of the fever at the Alms House, which was then situated at Tenth and Spruce streets. A few paupers admitted unawares died of it there.

masters and servants, fled each other's presence in horror; the most honored citizens were borne to a nameless grave without a mark of respect. No money could purchase care and assistance; even women died for want of help in the anguish of child-birth, because their houses were marked as infectious.

But, for the honor of humanity be it said, this state of things passed away as the first fright wore off. Even in the earlier stages noble characters stood forth fearless and unscathed by the trial, without "the smell of fire upon their garments." Joseph Inskip, and others of the Society of Friends, were especially notable in good works. The Medical Faculty faced the danger as dauntlessly as the soldier faces a breach, and ten of them fell at their posts. The clergy of all denominations were not a whit behind them; six Protestant and Catholic clergymen and four noted ministers of the Society of Friends died of the fever, and ten other clergymen caught it but recovered after severe illness.

By the 10th of September the three guardians of the poor were worn out by their extraordinary exertions, and the disease was again and more rapidly gaining ground. They, with the mayor, appealed for personal aid to the benevolent citizens, and the response they met with forms one of the brightest pages in our municipal history. Ten public spirited men—Samuel Wetherell, Stephen Girard, Thomas Wistar, Israel Israel, Thomas I. Peters, Joseph Inskip, Henry DeForest, Andrew Adgate, John Hawkins and Caleb Lowne—at once offered their services. After rapidly investigating the situation and its most pressing needs, they organized a large committee of twenty-four citizens, with the mayor at their head, assigned the various duties to sub-committees, voted to raise money, purchase supplies, procure proper attendance, furnish ambulances, establish a patrol to protect the property of absentees, relieve the suffering poor, and to assume all the powers demanded by the crisis, subject to the approval of a future general meeting of the citizens. Two of them, Stephen Girard and Peter Helm, took charge of the Bushhill Hospital—the most dangerous and the most responsible of posts. They found it in a most wretched state, full of unspeakable filth, served by profligate and abandoned nurses, and in very fact a great slaughter house from which the sick shrank away as a region of inevitable death. They at once reorganized the whole establishment, enlarged its accommodations,

replaced improper by trustworthy attendants, and properly classified the patients. The kitchen was supplied with proper food and competent cooks. The proffered attendance of two able physicians—Dr. Benjamin Duffield and Dr. Deveze, of Cape Francois—was accepted, and care taken that their prescriptions and directions were carried out. In a short time the popular horror of Bushhill ceased and it was necessary to take measures to exclude sick persons who were not suffering from the fever, but preferred going to the new hospital instead of the old one.

The main committee were very handsomely supported by their fellow-citizens. All parties acquiesced in their temporary and benevolent despotism; the Bank of North America honored their drafts on its funds. But their work was an extremely unpleasant one. Carey, who was one of their number, refuses to enter into the sad and monotonous details of their sessions, which were occupied with provision for the sick and the destitute. About the second week of October the disease reached its height, and the interments for several days were over a hundred a day. When it is remembered that Philadelphia was but a fragment of what it now is—that the population of the city proper (lying between Vine and South streets) was only 21,000, and that the population of the entire city had been reduced by the hurried departure of about 17,000 of the inhabitants—it will be seen what a terrible scourge was sweeping through it. In three months the interments numbered about 5,000, and the grave-yards presented a terrible appearance. They could only be likened to a newly-plowed field.

With the increase of the danger the panic largely subsided, and the best and commonest feelings of our nature reasserted their sway. Society was found reconstructed after an apparent dissolution, prophylactic nostrums were thrown aside, and the people went quietly forward in the path of duty, with the grave and solemn tread of a vast army advancing under a decimating fire. Four of the committee—John D. Sargeant, Andrew Adgate, Daniel Offley and Joseph Inskcep—caught the fever in the discharge of their duty, and died “with their armor on.”

In the meantime the utmost terror pervaded neighboring towns and cities. Chestertown, Md., was the first to take action, and refused to let the Eastern Shore line of stages pass through their

borough. Then New York adopted a series of measures which culminated, September 17th, in a prohibition of all intercourse with Philadelphia; and a week later vigilance committees were established to enforce the resolution. They followed up these friendly measures with a series of prolix addresses and resolutions extending over the whole period of the pestilence. Trenton and Lamberton, N. J., formed a league to carry out similar measures of hospitality. The Governor of Maryland subjected all Philadelphians, or vessels from this port to quarantine. The people of Baltimore then adopted the same measures as at New York, while couching them in milder terms, and stopped the Western Shore line of stages. As the alarm spread, Massachusetts, Virginia, Rhode Island, North Carolina, South Carolina and Georgia adopted rigid quarantine measures, and their principal cities and towns—Boston, Charleston, &c.—followed the example set by New York. Nor did the cities of our own State behave much better. Reading, Nazareth, Bethlehem, &c., established a rigid quarantine, and enforced it by popular committees. The most horrible stories as to the state of Philadelphia found ready credence; it was currently believed that all but a few of our citizens had perished, and that the survivors had given over the work of burying the dead in weariness and despair. A reign of terror seemed to spread through the whole Union, and to extinguish all humane feelings. Travelers from Philadelphia, or even persons only suspected of being such, perished through fatigue, hunger and exposure on every road that led from our smitten city. If any residents of neighboring cities refused to coöperate in these inhospitable precautions, they were subjected to social persecution, and refused—as far as possible—the necessities of life. Even fugitives, who had secured places of retreat before quarantine measures were adopted, had difficulty in avoiding the business of mounting guard against their less fortunate fellow-citizens. Of course quick-witted refugees evaded all these precautions of their unwilling hosts. And yet there was more or less of the malignant fever in other parts of the Union. In one street of New York several deaths had occurred in 1791, but its progress was inexplicably stopped. In 1793, Lynn in Massachusetts, and Georgetown and several other towns in Virginia, were visited, as well as Philadelphia, and in other places epidemic diseases raged fearfully.

We are glad to say that the want of hospitality evinced by most cities was not universal. In Woodbury, N. J., only four persons voted in town meeting to suspend intercourse, and our refugees were allowed free entrance. The people of Springfield, in the same State, offered their town as an asylum to the people of Philadelphia, and the same course was adopted by the people of Elizabethtown. Chestertown, Md., which took the lead in refusing intercourse, fitted up a hospital for sick strangers, and appointed a physician to attend them. Elkton did as much, and also offered their town as an asylum. Wilmington, in the first impulse of fright, proposed exclusion, but soon came to a wiser and more humane conclusion; they received Philadelphians freely, and while they fitted up a hospital for the sick, they actually nursed most of them at their own houses. Several citizens fearlessly kept open-house for all Philadelphians. These acts of Christian charity and humane kindness were indeed exceptional, but they should never be forgotten. Especially should we remember that our neighbors of New Jersey adopted no measures of general quarantine, and that three of their towns distinguished themselves by a courageous humanity.

When the fever had once reached its height, it abated more rapidly than it had spread, and few caught it after the end of October. The business of the committee changed rapidly in its character. An orphan asylum was established to take charge of the host of children whose parents had perished of the disease. Measures were taken to thoroughly cleanse the houses where persons had died, and the eagerness of the absentees to return had to be repeatedly checked, and the necessity of sanitary precautions impressed upon them. On the 14th of November Gov. Mifflin published a proclamation appointing a day of special thanksgiving for the merciful deliverance vouchsafed to the city. The last deliverance of the committee was issued November 26th, and had reference to the cleansing of the city. On the 22d of March, 1794, the people of Philadelphia, Southwark and Northern Liberties met to receive their report, and extended to them "their most cordial, grateful and fraternal thanks for their benevolent and patriotic exertions," and expressed the hope "that their great services will be held in everlasting remembrance." So mote it be.

MINNESOTA.

WHEN the Cherokees were driven from North Georgia many years ago, their occupancy comprising the mountainous region of that State and East Tennessee, they, as is well known, left with a degree of reluctance bordering on desperation; for they said it "was a land where one was neither sick nor sorry." And, now, if there is a land anywhere else on the broad earth where the visitor or resident is made to feel the force of the Cherokee averment, that region must surely be comprised in the great North-west, and especially in this State of Minnesota.

Moreover, a land of such fertility that the world itself is challenged to excel it, and one great and distinguishing feature of which is that excellence set forth in Holy Writ, when a goodly land is portrayed, "a land full of springs and running waters;" every few miles shows a crystal lake, the mirror of sky and shore, shining far or near; every chain of lakes almost shows its "laughing water," as the bright steamlet hurries onward to the sea. And if away up here North-ward, so far that the geography of our earlier years left us almost in the dark as to its true features,* we are supposed by the outside world to be suffering from winters too severe, even the natural laws, as operating elsewhere, seem reversed, or modified somehow, for with the approach of winter, even, we do not suffer that "chillness" which, too often in New England or along the Atlantic coast, appears—to use a homely expression—to "penetrate the marrow of one's bones," for the air here is dry, and bracing, and kindly, and men talk cheerfully and more briskly, as under some life-giving influence, which nothing outward can overcome.

Science and experience undertake to explain all this. They tell us that the air is dry; the direct reverse of that "chill November" weather which in moist England is fruitful of depression and suicides—more, it is said, than all the rest of the year together; and moreover, we are told that from this favored plateau, half the quantity of electricity—so much does it abound—will send back to the old States messages over the wires, that it takes to bring the same number of words hither.

* And yet St. Paul is in the latitude of Venice.—EDS.

All this being so, what marvel is it that men work here in driving forward railroads and other gigantic projects, with a will and a power which will not accept the word nay; and talk as confidently of shortly reaching the Missouri river, and Pembina, and ultimately Pugett's Sound, with their railroads, as if none, or only the most trifling, obstacles intervened.

I have come out here on the line of the great Northern Pacific road, "prospecting," to use a California phrase; only my "placer" may be a potato field, a cranberry patch, or a wheat farm; and so if the readers of the *PENN MONTHLY* can be interested in what I may bring to their notice, why all the better for themselves, perhaps, if only it helps some of them to better homes, and better health and spirits in a land like this, one not only the "land of promise" but of performance also.

The way hither from the Atlantic coast by Chicago to St. Paul is so familiar to most persons that perhaps of that portion of the route little or nothing need be said: but passing the latter point and Minneapolis, the true wildness of the North-west commences, continues onward to the junction of the Lake Superior and Mississippi road with the Northern Pacific, near the Dalles of the St. Louis, and thence to the more remote point to which the Northern Pacific is completed at the "Third Buffalo Crossing," approaching closely the Red river of the North.

To return my course for a brief space. Perhaps the first startling evidence the traveler has that he is in a new and peculiar region, one unlike almost any other portion of the United States, is the sight of White Bear Lake, about equidistant from St. Paul and Minneapolis. A magnificent sheet of clear water, with gravelly or sandy shores, and stretching miles away in a most charming perspective, one of the prettiest islands imaginable being a salient feature in the landscape, whilst already two or three hotels dot the shores not far from the the railway track. In succession appear Forest Lake, Bald Eagle, and other beautiful bodies of water, until one is not surprised to find springing up along the line of the road, thriving settlements, such as Rush city, Hinckley, and others, with the isolated cabins of the many hardy and hopeful settlers, marking the way from station to station.

The junction, some one hundred and thirty miles from St. Paul,

is finally reached through a region alternately forest and prairie, although the former largely predominates, whence the traveler may take a "new departure" for the wilder regions beyond. Here, as in most of these settlements, one sees substantial looking frame dwellings, alternating with tents and shanties, whilst here and there along the route, one falls in with the sturdy axe-men, whose prowess is giving to the rest of the Union a new world.

The Dalles of the St. Louis, although often described, are so singular and remarkable in their wildness and beauty that a few words in regard to them may not be unwelcome. Ere long to be utilized, the waters to be siezed upon, as it were, and to be taken through raceways, flumes, and under or over revolving wheels—they may even be put into leading strings, like the Falls of St. Anthony, may have "aprons" forced upon them—until the future traveler will see little in them but a portion of that machinery which saws, and grinds and spins to keep the world of humanity supplied with the ornamental and the useful. For ten miles or more, the river rushes and plunges over a singularly rugged and tortuous channel, its clear waters churned into foam, or, for short distances, forming little basins or pools, each verging on another and another tiny fall, bordered with the wildest and most rugged growth of pines, birches and other trees of this latitude, and with little rocky islands scattered along the whole bed of the river; the high bluffs on either side make the deep glen at the bottom all the more rude and picturesque, the whole forming a scene that is worth a journey here to behold.

Thompson, the name of the new town at the Dalles, is making active preparations to turn the fine water power to good account. There is a degree of activity, of earnest push and bustle, about the place, which seems to have been caught from the hurrying waters; and whoever may be incredulous as to a possible splendid future as a manufacturing center, it is plain they are not; and it is quite likely, too, that this determined spirit will force success, where otherwise the case might seem unpromising. With water power in any quantity desirable, and with material to employ it upon, there would seem no doubt but that the future will see a most thriving and populous community at this point.

But what of the so-called "severities" of the climate, that condition which makes the less hardy of the race shrink from a

contest with Nature, in her harder aspects? Well, winter is declared, on all sides, to be the most enjoyable season, and, sure enough, winter is coming once more here in the far North-west. But what of it to him who, if tempted for a moment to regret the fascination of warmer latitudes, has power to draw upon his own experience for comparisons and contrasts; who can tell a grasshopper from a tarantula—a caterpillar from the savage and hateful centipede. I have been a resident of the tropics, and I can remember the huge spider, which on the wall above my head, in the morning, seemed to spread out like a tea-saucer in diameter, the disgusting and terrific reptile who had bitten me on the lip during the night, and whom I slew with a feeling of wrath which for the time being extended itself to everything tropical.

And then that lassitude born of heat and of half-developed fevers, of a too careless exposure to the burning rays of the sun; or to the deadly miasma and dews of night; that benumbing apathy which, keeping one to couch or hammock, makes him pray all the day long for the night breeze, and which, sleeping, makes him dream of the grateful winds and even the snows of the north. In this connection, who has not heard of the English sailor who, worn out with his long and tedious man-of-war cruise up the Mediterranean, tired out with the heat and monotonous sunshine of that region, aroused his fellows one rainy and tempestuous morning with the glad greeting, at the hatchway: "Tumble up, lads, tumble up! Here's weather as is weather; none of your infernal blue sky."

Happiness is by comparison, at best; and our experience is, that life is full of compensations, the fact in one direction being established, that if men will seek and occupy rich lands in low latitudes, they have, in most cases, to take along with them those disabilities which come of poisoned or corrupted blood, with the cadaverous complexion and varying pulse and spirits, such as fevers, active or slow, are sure to produce. Besides, the experiences of Dr. Livingstone, of Baker, and of numberless others, teach this; and if we want examples and authorities closer home, let us take those of our troops in the swamps of Florida and the Carolinas, or other of the Gulf or cotton States, during the recent war.

Nay, in my own experience, I need not go so far south as that.

Crossing Kentucky on horseback once, I struck a high and rocky ridge back of the town of Richmond, and toward Cumberland Gap, or in that direction, where the land appeared so very poor, that it seemed indeed a struggle for anything of value to grow.

Whilst the landlady was preparing what proved to be a capital breakfast, I began condoling her case, in that she was a resident of so poor a locality. But I soon discovered that I need not have done it. "Poor as it was," she said, "many of her neighbors who had moved to the richer portions of Arkansas or Missouri, had returned thither to the Kentucky ridge, because they could get here what they could not get in their projected new homes—they were sure in the old places, of good air and water." It was one of the many striking lessons of life one meets with, out in the great world; and I received it with all docility, for I was sure the good woman was right.

If the seeker after an eligible and absolutely unexceptionable home, must have, as a condition precedent, that desideratum with many a "mild climate," by which is understood a warm one, let him remember that heat and moisture, however favorable to vegetable life and pecuniary thrift, are in most instances the deadly foes of human life and health. And if the climate be dry, so that, as in portions of the Pacific States, nothing will grow but with irrigation, let it be noted that in case of drought, or even in ordinary seasons, this condition of things, except for fruits, is but playing at cropping; it cannot, except in rare cases or seasons, produce the results constantly achieved here in Minnesota, or in other of the States of the North-west.

Nothing is more certain than that one of the greatest blessings, and, indeed, marked necessities with mankind, is an abundant supply and distribution of pure, fresh water; and in a country so far north that it cannot become the deadly foe to human life, as it too often proves to be in the tropics or approximating them, it is a blessing indeed. Needful for all great enterprises that advance civilization and society; indispensable to saw and grind, and to a successful cultivation of the great crops of cereals; needful, further, to insure river transportation to bear cheaply from a country its farm produce, no country can, under ordinary circumstances, concentrate or command a large and industrious population unless well watered; and if well watered and hot, we aver once

more, it cannot be healthy, any more than can portions of Africa and South America, proverbial for those miasmatic conditions and tendencies that are destructive to human life.

Where health can be assured, then, as in this State of Minnesota, water in abundance is an unspeakable blessing; and thinking of it in that light, let the reader consider for a moment, the remarkable experience of Captain Eyre on the coast of Australia. Committed to a land journey of fifteen hundred miles along the coast, on an exploring expedition, he related the amazing fact, that not in the whole distance did he find a river or streamlet running into the sea; and with his one or two companions, they only sustained life in that long and fearful trip, by digging in the sand at the bases of the hills, which giving them a few quarts of water over night, by filtration, kept them from absolutely perishing. Fancy, then, what our own country would be with no river running into the ocean from Maine to Texas, and we may thus form some approximate idea of a country so vast without water. Remembering that from the Atlantic coast line to the Rocky mountains at least, fresh water is mostly accessible at all points, and we may well be thankful as a nation, that our "lines are cast in pleasant places."

In view of all this, need we of this latitude regret that if we are subject to winter with its ice and snows, we have not the moisture, and heat and miasma generated of these in more southern latitudes. With water supplied in prodigal abundance, we may well survey the scene with satisfaction and delight, because the air is dry, and all the conditions such as to conduce to the highest health. Almost uniform, as the temperature is when the winter once sets in, the simple fact that it hardly ever gets above the freezing point, makes the cold hardly felt; certainly prevents largely the discomfort so generally experienced in milder, but more moist climates, and confessedly so often detrimental to health. Let the invalid, then, as well the more fortunate in regard to health, even the Sybarite, if any such there be amongst the readers of the *PENN MONTHLY*, remember the peculiarities of this wonderful climate and State of Minnesota.

MINNEAPOLIS, Nov., 1871.

W.

THE PHILADELPHIA SOCIAL SCIENCE ASSOCIATION.

REPORT OF THE EXECUTIVE COMMITTEE, READ AT THE ANNUAL MEETING,
DECEMBER 12, 1871.

THIS Association has, during the past year, continued to carry out the purpose for which it was organized, as set forth in its original plan—to guide the public to the best practical means of promoting the amendment of laws, the advancement of education, the prevention and repression of crime, the reformation of criminals, the furtherance of public morality, the adoption of sanitary regulations, and the diffusion of sound principles of economy, trade and finance.

There are now one hundred and sixty names of members on its list—about thirty more than at its last annual meeting. It has lost by death the assistance and valuable influence of Messrs. Stephen H. Colwell, Samuel V. Merrick, J. K. Collins and Geo. D. Parrish, all of whom took a lively interest in the labors of the Association. The valuable library of Mr. Colwell has been handed over to the University, and it is hoped that at no distant day his cherished purpose of founding there a chair of Social Science may be carried into execution.

The number of active members of the Association has been diminished by the removal from this city of the Hon. Walter H. Lowrie, Prof. N. S. Smith and Mr. T. Guilford Smith, but they still give evidences of their interest in the various measures under discussion by their occasional presence at its meetings, and by supplying papers for them. During the past year there were five public meetings held, at which papers were read and discussed as follows:

- 1st. January 19, '71. Mr. Lorin Blodgett, on Compulsory Education.
- 2d. February 16, '71. Mr. Eckley B. Coxé, on Arbitration as a Remedy for Strikes.
- 3d. March 16, '71. Mr. N. C. McMurtrie, on the Proposed Revised Statutes of Pennsylvania.
- 4th. April 20, '71. Mr. Thomas Cochran, on Local Taxation.
- 5th. May 5, '71. Dr. J. S. Parry, on Infant Mortality.

These papers were read at the Hall of the Mercantile Library, before respectable audiences, many of whom took part in the discussion of the questions submitted. The papers were afterward printed, together with a phonographic report of the debate, and largely distributed, so that the work of the Association reaches far beyond its own locality. The same system of public meetings of the several departments will be maintained, and the following papers will be read and discussed on the third Thursday of each month:

December 21. E. Spencer Miller, Esq., on *Statute Law and Common Law*, before the Department on Jurisprudence and Amendment of Law.

January 18. James S. Whitney, Esq., on *Apprenticeship*, before the Department of Mining and Manufactures.

February 15. Hon. F. Jordan, on the *Proposed Amendments to the Constitution of Pennsylvania*.

March 21. Dr. J. S. Parry, on *The Uses and Abuses of Medical Charities*, before the Department of Public Health.

April 18. Mr. E. A. Peet, on *The Science of Life Insurance*, before the Department of Economy, Trade and Finance.

Other papers are also expected from Messrs. Lorin Blodgett, Campbell Tucker and Guilford Smith. All students in Social Science are requested to bring to the public attention, through this Association, the results of their study of any of the numerous and important questions within the plan of its investigations. It is hoped, too, that persons not members of the Association, who have given attention to measures of public interest within the scope of Social Science, will make use of the opportunity thus offered by the stated public meetings of this Association, to submit their views to its members, and to unite their discussion and that of the public.

The accounts of the Treasurer show a total of:

Receipts.....	\$1,843 62
Expenditures.....	1,474 95
Leaving a balance on hand of	368 67

The larger part of the sums thus collected and disbursed, were contributions to the Printing Fund of the General Association, in return for which our members received the printed papers of the General Association; the papers read before our own Local Asso-

ciation were also sent to Boston for distribution among the members of the General Association. In addition, there was a contribution by the Pennsylvania Railroad, of the sum of one thousand dollars, toward the Fund for printing the *Emigrant's Hand Book*, issued by the General Association, and we may fairly claim this sum as a part of the local assistance given to the General Association. Occasional correspondence on various topics of interest, has been maintained with the officers of the General Association, in Boston, and a detailed statement of their plans and operations for the current year, 1871-2, is appended to this report. The members of the Association have received two volumes of *Transactions of the Association*, a pamphlet on *Free Libraries*, another on *Emigration*, and the five papers read at our own local meetings; so that the return for their annual contribution, has been a very large one, and such as to justify the Association in expecting the coöperation of all the members in the work of their respective departments, and the addition of a large number of persons as members to increase its means and efficiency in carrying on the task in hand.

The field over which social science ranges is a very wide one, and certainly in this city there should be found some means of bringing together for mutual counsel and assistance, the men who take a common interest in subjects such as are included in the programme of this Association. The recent activity displayed here in political reform, is a proof of the advantages of an association in which questions affecting municipal requirements, may be fairly and fully discussed. No measure of public good can ever be finally accepted either by legislature or people, without just such knowledge of the need for it and of its fitness, as can best be acquired by the sound study and combined consideration of thoughtful men. The agitation for a reform of the civil service of the United States, a measure always urgently sought by this Association, has succeeded so well that it is only a question of time when some system of reform must be adopted. There yet remain for our study, the numerous questions of detail and application. Of the measures that have been discussed by our Association, several have been brought up in our own State and local legislatures; such for instance as the method of arbitration as a remedy for strikes; the disadvantages of revising the statutes in a careless and mischievous

way ; the difficulties of local taxation ; the question of compulsory education ; these are all still open subjects, but this Association has secured a consideration and study of these topics, which cannot but do good.

It was at a meeting of this Association that Mr. Mundella gave the results of his experience as a large employer of labor, and as the representative of the interests of manufacturers in the British Parliament, and of the importance of arbitration as a remedy for strikes. The subject was carefully elaborated by Mr. Coxe, one of our members, in a paper read before this Association, and the successful application of arbitration to the strikes in our own coal region, was greatly advanced by the intelligent discussion of the question at our meetings.

There can never be any fear of paucity of subjects for study and consideration, but there are some of them which specially call for the investigation of students of Social Science, and this Association invite their coöperation. One of the most pressing requirements of the day is the application of civil service reform to our State and municipal administration. Recent events have attracted attention to the terrible consequences of the loose system under which our cities have almost lost all control of their officers. Before any cure can be made thorough, or any remedy found that will really be lasting, there should be diligent inquiry into the organization of our local offices, so as to ascertain what are the real duties and legitimate rewards of the officers elected or appointed to fill them. The Law Association has taken in hand part of the task, that which specially applies to their profession. But the remedy for existing evils must be sought in exhaustive inquiry, and in such measures of reform as will overcome interested opposition and indifferent inertia in and out of the legislature, and in the body of voters.

This Association, while it disclaims all political bias and desires to hold aloof from any partizan measures, claims the right and invites its members and the public generally to undertake the duty of discussing reforms which have a direct, practical bearing on the good administration of our Government, National, State and local. Although the final adoption of laws on the subject requires the action of legislatures which have a political complexion, yet it is the duty of all good citizens to coöperate in advance in securing the largest measure of information and the

best method of reform, so that law-making may cease to be the result of accident, and be based on knowledge and a right use of the sound common sense and general intelligence of the people to be affected by the laws. Nor is it enough to undertake new schemes or to adopt all changes. This Association claims part of the credit of having delayed the adoption of a proposed revision of the statutes of Pennsylvania, which failed to commend itself to the members who constitute our Department of Law.

The paper of Mr. McMurtrie, pointing out the faults of the proposed revision, which was instrumental in postponing it to the next legislature, will be followed by an address by Mr. Spencer Miller, on the broad question of the comparative advantages of the common law over statute law.

The Association points to what it has done in its short existence, and what it has in hand for the current year, as the best justification for its renewed demand upon its members for activity and zeal in forwarding its work, and for asking all who take an interest in such measures of reform as are within its scope, to come to its help by becoming members, and by preparing for its meetings papers and addresses on such subjects as are within their special field of inquiry.

The popular vote at the late election decided, by a large majority, in favor of calling a Convention to revise and amend the State Constitution. The necessity of inviting attention to this important subject has already been largely commented on in the newspapers throughout the State; but the preparation of material and the preliminary discussion of various measures, likely to be submitted to the Constitutional Convention, require thoughtful study. To this end, the Association has invited several gentlemen of experience in State government, to prepare papers on the subject. The Department of Jurisprudence and Amendment of Law will call public meetings for the purpose of reading and discussing them; and it is hoped that, in this way, the matter may be treated with such thoroughness, quite apart from all danger of merely local or political influence, as to supply abundant material for the Convention and relieve it of the discussion of merely preliminary and tentative questions.

Col. Francis Jordan, Secretary of the Commonwealth of Pennsylvania, will read a paper, on this subject, on the 15th of Feb-

ruary. His large experience in State government and his abilities displayed in the sound administration of his department, will be sufficient guarantee of the valuable material likely to be submitted to this Association, and, through it, to the public. It is of such great importance that every effort of our members and of the friends of sound constitutional reform, ought to be given to secure a large audience to hear Col. Jordan's paper and an intelligent discussion of its views, with the broadest possible dissemination through the newspapers of the State.

One of the subjects which especially commends itself to our citizens, is that of the necessary constitutional legislation as to the good government of our city. The population within its limits, and the large number of persons beyond its borders directly affected by our municipal interests, the immense and growing manufacturing industry, the enormous railroad capital, the revival of our shipping and commerce, are all elements to be considered in the preparation of a new Constitution.

The questions already discussed by this Association, will acquire a fresh interest from the importance they acquire, by being submitted to a constitutional convention. *Compulsory Education* may receive at their hands better treatment than that given it by the legislature. *Civil Service Reform* can well be brought before the public as a matter coming close home to their local interests, when the labors of the National Commission and the Congressional Committee have been debated, discussed, and it is hoped, adopted by the several departments of the General Government. The successful adoption in one branch of industry, that of coal mining, of *Arbitration as a Remedy for Strikes*, may serve to show how much good results from the interchange of views with the representatives of foreign social science organizations, illustrated by Mr. Mundella's address and Mr. Coxe's paper. The requirements of the most helpless class of our poor, as suggested by Dr. Parry's papers on *Infant Mortality*, cannot be too strongly urged on our city government. Questions of *Local Taxation* so thoroughly stated by Mr. Cochran, are renewed by the difficulty recurring each year, of adjusting our municipal revenues and expenditures. The difficulty of making a satisfactory *Revision of the Statutes*, so well pointed out by Mr. McMurtrie, will again be discussed by Mr. Spencer Miller. The success of this Association in securing the help of

thoughtful men in bringing these topics home to the people may well be accepted as showing that so long as the Association is supported and enabled to do so, it will continue to labor for the best interests of social and legislative reform.

Nor is this Association without able coöperation in this field of labor. The year just closing, is marked by the fact that two addresses on Civil Service Reform have been made in this city to large audiences, one by George W. Curtis, the other by Senator Schurz, in the popular courses undertaken by Mr. Pugh. The attention of several thousand thoughtful citizens was thus called to the important question now under discussion in Congress and out of it.

A representative in Congress from this city, the Hon. Wm. D. Kelley, is now carrying out the pledges in support of Civil Service Reform made by him at the time of his last election, and he has been fitly placed at the head of a special committee to study the best means of a practical system of reform. The story of the abuses of the existing condition of things, has been told over and over again, nor can it be told too often; but the more difficult task remains, of working out such a plan as can be confidently submitted to Congress, with proof and assurance that it will secure favorable legislation and do its work when it becomes a law; is it not within the scope and power of this Association, to guide and direct its members in the severe work of such an analysis of the various functions of government, as will secure their proper administration? The addition to our college course of a systematic instruction in the science of administration, might well be at once urged upon the authorities of our own university, already enriched by the valuable library of Mr. Colwell, who suggested this use of it.

The work of this Association has not been limited by the papers read at its own meetings or the work done within its own body. One of the first fruits of the usefulness of such an organization is exhibited in the report to the British Government on the condition of the laboring men in Philadelphia, recently reprinted here from the Parliamentary Blue Book. It was mainly due to the industry of Mr. Blodgett, as already exhibited in his papers prepared for this Association, and the acquaintance made with him by Mr. Mundella, on his visit and active participation in our general

meeting. Her British Majesty's Consul at this port wisely availed himself of Mr. Blodgett's services, and has given to his own government, and to ours, a very useful account of the comparative cost of living, production of labor and other kindred questions. It is a branch of learning and investigation too little pursued in this country, and one that comes clearly within the scope of this Association. Mr. Blodgett has been requested to pursue his studies in this direction, and to submit the results to our Association at a special meeting to be held at his convenience. The usefulness of this Association will not, however, be limited to the papers of its own members, and while they are expected to give us the benefit of their own labors, they are also urgently requested to seek the assistance and to make known our readiness to accept the aid of all students of Social Science.

Letters have been received from the Secretary of the General Association giving, from time to time, accounts of the operations of that body, and the printed transactions show the work done by the coöperation of the men gathered together in the interests of Social Science throughout this country. The field of labor is so large that this Association finds no difficulty in finding work to do and in making good use of the work done by the members, both in their capacity as members of the General Association and in their places within the local Associations. The continued activity of the Philadelphia branch is, no doubt, appreciated by the General Association, and to them in turn we owe many suggestions of a useful kind, and especially obligation for their constant encouragement to pursue our own independent and active career. The relations of the parent Association with this and other kindred Associations, are necessarily limited to an interchange of papers and correspondence on topics of general interest, but just such coöperation and sympathy are wanted to excite members and others to pursue their studies and renew their investigations, and to show the advantage of submitting their results to their own local Associations, and to the broader criticism and judgment of the officers and members of the General Association. This body, too, combines in its organization, with numerous local Associations, peculiar facilities for securing the work of the men best fitted to represent the interests within its broad field of labor, and for bringing

itself and its labors home to kindred Associations abroad where Social Science has established itself on a firm, broad basis.

The usefulness of this Association has been largely increased by the efficient assistance rendered to it by the *PENN MONTHLY MAGAZINE*, published in this city. That journal printed the papers read before the General Association at its meeting held here in the fall of 1870; it continued its service to the cause of Social Science, by printing the papers read before our own local Association. In this way the investigations of our members were brought home to the attention of a large body of readers who would not have been easily satisfied with the necessarily brief reports of our proceedings published in the daily newspapers. Still, to the press of Philadelphia this Association is grateful for their constant and accurate reports of its proceedings and for thus bringing to its aid the presence at its meetings and the criticisms of its various subjects of discussion by a large number of our fellow-citizens. Perhaps one of the greatest difficulties and hindrances in the way of abstract discussions, such as this Association invites, is the apparent want of interest exhibited by the general public. To the *PENN MONTHLY* and to the newspapers of Philadelphia the cause of Social Science is indebted for securing it a full, fair hearing and thus enabling its students to make some estimate of the effect of their work and to measure the extent of the influence exerted by discussions of subjects which everybody feels to be important, but which nobody is ready to leave to the haste of legislation and the improvidence of constant change and amendment. So long, therefore, as the *PENN MONTHLY* prints the papers, and the newspapers publish the discussions of our several departments, we can count on reaching audiences large enough to help to guide public opinion.

The President of this Association, the Hon. Wm. Strong, resigned his office on the 7th of October, on account of his permanent removal to Washington, but at the request of the Executive Committee he allowed his name to be used until a successor could be chosen at the annual election and meeting. [Mr. H. C. Lea was chosen to this position.]

Members and others interested in any of the subjects included in these departments, are requested to take part in their proceedings, and, for that purpose, to prepare papers on topics connected

with the study of Social Science, so that they may be read and discussed at the stated public meetings of the Association. The members of the Association are requested to notify the committee of the department with which they wish to be especially connected.

By order of the Executive Committee.

J. G. ROSENGARTEN, Sec'y.

AN APPEAL TO THE GRADUATES AND FRIENDS OF THE UNIVERSITY OF PENNSYLVANIA.

AT the meeting of the Society of the Alumni of the University, held at the College hall, December 21, 1871, Provost Stillé exhibited a plan of the new University building, and submitted a design for a memorial window of stained glass, for the chapel of the building now erecting at Thirty-sixth and Locust streets—to be in honor of the illustrious founder of the College of Philadelphia, Dr. Franklin. The window is of Gothic form, twenty-five feet high by eleven feet wide having in the arch three compartments. In the upper one it is proposed to place a copy of the portrait of Dr. Franklin, by Martin. As it is designed also to show the changes which have taken place since the first charter was granted in 1755, the coat of arms of the Penn family, by whom that charter was granted, will be placed in one of the lateral compartments, and in the other the arms of the State of Pennsylvania, which granted the present charter in 1791. The lower portion of the window is divided by mullions into five panels. On the center panel will be inscribed the famous line of Turgot: *Eripuit cælo fulmen sceptrumque tyrannis*, and underneath a civic crown. On the panels on one side of the center will be placed pictures of the Old Academy in Fourth street; of the Printing Press used by Dr. Franklin in London; and of the First Discovery of Electricity. On the other side a picture of the present University; of the last improvement in the Printing Press; and of the newest Telegraphic Machine. The portion of the window not occupied by the paintings, will be of the richest stained glass, in which appropriate emblems will be worked.

This beautiful design was prepared for the window by an experienced artist in stained glass, and it will be executed by his firm, Magee, Smith & Clark, at their works in this city, under the supervision of the architect of the University, T. W. Richards, Esq.

The following resolution was unanimously adopted:

Resolved, That the Society of the Alumni of the University adopt the suggestion and approve the design of a memorial window to Dr. Franklin, to be placed in the chapel of the new University, and cordially invite the assistance of the Alumni to coöperate in securing the execution of this very desirable plan, and that a committee of five, together with the president and secretaries of the Society, be appointed by the chair, to take such measures as may be necessary to carry the above resolution into effect.

We therefore ask the members of the Society, the Alumni and the friends of the University, to do what they can to secure the sum of money necessary to carry out the plan of a memorial window, and to subscribe and collect subscriptions for the purpose, and forward them without delay to Wharton Barker, Treasurer of the Society of the Alumni, No. 28 South Third street, or to any member of the committee. The rapidity with which the beautiful and imposing new University is now advancing to completion, makes it especially important that the money asked for should be promptly collected, so that the execution of the design may be at once begun.

The design itself is so striking and effective, that it will be placed upon exhibition at Messrs. Caldwell's, in Chestnut street, and the graduates and friends of the University are requested to examine it, and to call the attention of all who take an interest in art to this opportunity of adding so good a specimen of stained glass to the other architectural attractions of the new University. It has been suggested that the subscription should be limited to *five dollars* from each member of the Society of the Alumni, but the committee prefer leaving it to every graduate and friend of the University to send in whatever sums he can give himself and procure from his class-mates and other persons. It is, however, thought desirable that the different graduating classes should coöperate in raising money for the purpose of thus decorating the new chapel of the University, as a memorial alike of Dr. Franklin and of the affectionate interest felt by the students in their venerable Alma Mater. It is particularly requested, there-

fore, that each class should organize, and appoint one of its members its representative, to collect money for the purpose of securing the fund necessary to procure this memorial window, and upon its receipt by the treasurer it will be properly acknowledged, both to the individual giver and as the gift of the class of which he is a member. It is hoped that in this way, not only will the present design for a memorial window be promptly carried out, but that the generous contributions of the members of the Society of the Alumni, and of the other graduates and friends of the University, will provide means to furnish the other windows of the chapel with stained glass in keeping with the one already undertaken.

The committee request a prompt reply to this circular, and that subscriptions be sent to the treasurer, or to any of the undersigned:

F. CARROLL BREWSTER, <i>President</i> , 214 West Washington Square.	} <i>Of the Society of the Alumni of the University of Penn- sylvania.</i>
GEO. D. BUDD, 707 Walnut st.,	
Z. P. DOLSON, 615 Walnut st.,	
WHARTON BARKER, <i>Treasurer</i> , 28 South 3d st.	
J. G. ROSENGARTEN, 532 Walnut st.,	} <i>Committee.</i>
I. M. HAYS, M. D., 1527 Locust st.,	
JAMES P. SIMS, 426 Walnut st.,	
J. G. R. MCELROY, University of Penn'a.	

NEW BOOKS.

From James R. Osgood & Co., Boston. Longfellow's new volume—"THE DIVINE TRAGEDY."

It is the first part of a poem, of which "The Golden Legend" and the "New England Tragedies" forms the second and third parts.

From D. Appleton & Co., New York, "NICHOLAS NICKLEBY," and "DAVID COPPERFIELD."

Messrs. D. Appleton & Co. have in this new edition of the works of Charles Dickens met a real want of our people. It is cheap, neatly bound and illustrated by Cruikshank, Leech and Browne. "David Copperfield is the best of all the books of Mr. Dickens," who in the last preface says: "Of all my books, I like this the best. It will be easily believed that I am a fond parent to every child of my fancy, and that no one can ever love that family as dearly as I love them. But like many fond parents, I have in my heart of hearts a favorite child, and his name is David Copperfield."

From Claxton, Remsen & Haffelfinger, Philadelphia, "POEMS of J. G. BRIN-
DLE," and "DREAM LIFE," and "OTHER POEMS," by Stockton Bates.

THE
PENN MONTHLY.

FEBRUARY, 1872.

· FRANCIS DANIEL PASTORIUS.

SECOND PAPER.

THERE appear to be no data for determining at what precise period Pastorius became a Quaker. Was it in Germany? Nearly all of his friends who arrived in 1683, and many of those who followed, had espoused the Quaker faith in their old Fatherland. For the *Friends* of those days, inspired with the ardor of neophytes, and bent upon summoning all Christendom to listen to their testimony, had not, without some success, disseminated their doctrine in Holland and Germany. William Ames, Stephen Crisp, William Caton, George Rolfe, and the three great pillars of Quakerdom, George Fox, Robert Barclay and William Penn, had visited these countries, and found many "earnest seekers," who accepted the new dispensation of truth. William Penn, in looking back upon his own labors on the Continent, piously remarks, "God's blessed work increaseth and prospereth in these lands; magnified be His everlasting name." But the German converts to the Quaker faith were in a really pitiful plight. Denounced by the clergy as abominable heretics, jeered at by the rabble, and cruelly dealt with by those in authority,* they tasted all the bitterness of unpopularity and persecution. Though it

*In Hamburg they were threatened they should have their hats nailed fast to their heads.

may be true of all German Quakers what Stephen Crisp reports of those in London, "these innocent, harmless lambs bore all with great patience and quietness, and were not dismayed at these cruelties," no sooner was Pennsylvania opened as a place of refuge, than the harassed Friends of Griesheim, Mühlhiem, Crefeld and other towns, flocked to America, to seek shelter under Penn's benign laws. Some of the very persons (*e. g.*, Peter Shoemaker, named by Besse in the *Persecutions of the Quakers*), turn up as companions of Pastorius among the settlers of Germantown.

But withal there is no proof that Pastorius himself, while in Europe, was in any way connected with the converts to the new sect. No allusion to Quakers occurs in his autobiographical notes, and the only passage in the *Description of Pennsylvania*, that might be construed as referring to his intercourse with Quakers, is the following: "There is no want of mouth-Christians who strut about puffed up with worldly science and are in love with carnality, gaudiness and pride, his *trifolium diaboli*. But of those who would work out their salvation with fear and trembling, who live without deceit, and commune with God, the center of their life, their supreme good with this the whole strength of their heart, of these there is *rare avis in terris*. I found, however, at the University of Cambridge, and in the city of Ghent, some men who, hiding from the world, are entirely devoted and resigned to the Lord. They enlightened me, when they found I was an earnest inquirer, with many good doctrines, and strengthened me in my purpose." It would be difficult now to determine whether those persons, absorbed in the contemplation of the divine essence were Quakers, other dissenters, or perhaps members of the Philadelphia sect, at that time established by Jane Leade, with whose writings Pastorius at a later time was familiar.

It is not unlikely that Thomas Lloyd, during the long passage of the *America*, gained a powerful hold on Pastorius' mind, which was, through Spener's teachings, to some extent prepared for the Quaker doctrine.*

* Quite commonly the Pietists in Germany were nicknamed Quakers. As a remarkable coincidence, it may be mentioned in this connection that Baron Francis Mercurius von Helmont, who formed the acquaintance of the Quaker Wm. Ames, at the court of the Elector Palatine Frederick Ludwig, about the

At all events, it was not long after his arrival in America that he is found in full unison with the Friends, and quite a zealous member of the "meeting." In Germantown a Quaker meeting was organized, if Proud's information was correct, when the rude huts of the settlers (who, it will be remembered, arrived October 16, 1683) could hardly be under roof—namely, before the close of that same year.

"Among the first *Germantown* settlers from Krisheim was *Dennis Conrad*. The first religious meeting of the Quakers of that place was held at his house, in 1683. He was an hospitable, well-disposed man, of an inoffensive life and good character. He died in the year 1729." (*Proua's History of Pennsylvania*, I. p, 220).*

The first meeting house was put up in 1686. It was replaced by a more suitable one in 1705, for the erection of which the Friends in Philadelphia, Frankford, Abington and Byberry contributed liberally.

Pastorius' superior education and self-denying zeal made him the leading member of the Germantown Quaker flock. He had charge of the preparative meeting, was often sent as delegate to the quarterly meeting in Philadelphia and entrusted with business that required literary habits and fidelity. His library was stocked with the standard works of the Quaker faith, and, according to his own declaration, there was no book written by Fox, Penn and Naylor that he had not read. Whenever he speaks of his religious brethren he does so with affectionate warmth; even the dry propriety of the "cash book" is gracefully overruled by crediting the Quaker Society "in the first place with love," before he comes to the pounds and shillings. About one of the most esteemed Quaker authors he expresses himself forcibly, thus: "*Barclay* has a vein of gold, and his *Apology* I would compare to pure pearls,

year 1659, was the very person who startled Spener with the question, "How can we make our intellect enter the heart?" which was, perhaps, answered by the establishment of the *Collegia Pietatis*.

*By the records of the Abington Meeting, and other documents, it appears that the person alluded to was Tunes Kunders, who came from Crefeld. His daughter Anna, born July 4, 1684, was probably the first child born in Germantown.

to rubies and diamonds, against the gates of Hell, who stands as a witness for the mystery of godliness and piety."

When the great feud broke out which culminated in disowning George Keith and his doctrines, Pastorius staunchly sided with the great body of the faithful, and at the General Yearly Meeting at Burlington (Oct. 7th, 1692), he approved by his signature the testimony hurled against the Keithian schism. (S. Smith's *History of Penn'a*, in *Hazzard's Register*, vol. vi., p. 302). How strongly he felt on the subject we see very plainly by his remark in the *Beehive* (a folio manuscript): "Mr. Bugg and Mr. Keith are persons who were not so much deserters as cashiered men for their immoralities; for they did not come to the English church, but were thrust out from among the Quakers."

It is much to be regretted that no memoirs exist, which would throw more light on Pastorius' dealings with prominent men of his times. *Richard Townsend*, the fellow-passenger of *Wm. Penn* on the *Welcome*, who lived about a mile from Germantown, was his steady friend, and took an active interest in the rise of Germantown. His last will was drawn up by Pastorius. Another person mentioned by the latter in the most kindly manner was *Dr. Griffith Owen*, whose worth he commemorated, after death had removed his friend, in the form of these two epitaphs:

"What here of Griffith Owen lies,
Is only what of all men dies;
His soul and spirit live above,
With God in pure and perfect love."

And

"O bene si tecum sequi mur vestigia Christi,
Quis te suscepit nos quoque suscipiet."

Of Pastorius' attachment to Th. Lloyd, which did not die with the death of his friend, mention has been made heretofore; so also of his friendly intercourse with Wm. Penn. The cloud that darkened the political career of the founder of our Commonwealth, threw its shade on Pastorius' sympathizing heart, and his restoration was hailed with corresponding joy. When it was believed that Penn would for a third time visit his colony, Pastorius was ready with a salutatory poem, which still exists in manuscript. That this high esteem was reciprocated is shown by a bit of correspondence, which occurred between Penn and

Pastorius' father in the year 1698-9. The latter, who had not heard of his son for some time, made bold to approach Penn himself in a Latin letter (which went to England), inquiring "*de statu ac vitæ genere*," of his distant Francis Daniel.

To this Penn replied very politely: "*Nuper adhuc in vivis fuit filius tuus et jam nunc Philadelphie agit. Irenarcha* hoc anno est aut nuperrime fuit, alias vir sobrius, probus, prudens et pius, spectatæ inter omnes inculpataque famæ.*"

Turning again to the little Quaker meeting of Germantown, we shall now notice the declaration put forth under its authority, which has deservedly acquired historical notoriety, and which will be forever gratefully remembered by all lovers of human freedom. To use the words of Edward Bettle (*Notices of Negro Slavery*): "To this body of humble, unpretending, and almost unnoticed philanthropists (viz.: the Quakers of Germantown) belongs the honor of having been the *first association* who ever remonstrated against negro slavery."

The protest against keeping human beings in slavery was adopted at Germantown, on the 18th of April, 1688, and as the Germantown meeting was attached to the Dublin monthly meeting, it was addressed to the latter and presented on the 30th of the same month.

The matter being held too weighty for a monthly meeting to meddle with, it was submitted to the consideration of the quarterly meeting, and from there for the same reason recommended to the attention of the yearly meeting. Here the question could not so conveniently be got rid of, and the yearly meeting took the responsibility to smother the irksome intruder gently by a resolution, which is thus reported:

"1868. A paper being here presented by some German Friends concerning the lawfulness and unlawfulness of buying and keeping negroes, it was adjudged not to be so proper for this meeting to give a positive judgment in the case, it having so general a relation to many other facts, and therefore at present they forbear it."

This forbearance lasted long. Though the leaven of anti-slavery sentiment did not cease to work in the councils of the Friends, it

* Justice of the peace.

took eighty-eight years after the passage of the just quoted resolution, ere the Quakers resorted the last measure of discipline against slave-holding members of their Society, by denying them the rights of Christian fellowship, and finally, in 1780, provision was made for the gradual emancipation of slaves in Pennsylvania.

The original document containing the protest was for a long time supposed to be lost. E. Bettle, who wrote his essay in 1826, tried in vain to discover it. It was not till 1844 that the painstaking antiquarian Nathan Kite could announce that the original had been found,* publishing at the same time a verbatim copy of it in *The Friend* (vol. xvii No. 16). The remonstrance, which is notable for its boldness and its direct appeal to the best instincts of human nature, is too long to be reproduced here.† Some passages, however, may indicate the line of argument it follows:

“Is there any that would be done or handled at this manner? viz.: To be sold or made a slave for all the time of his life! Now, though they are black, we cannot conceive there is more liberty to have them slaves than it is to have other white ones. There is a saying, ‘that we shall do to all men like as we will be done to ourselves;’ making no difference of what generation, descent or colour they are. In Europe there are many suppressed for conscience sake, and here there are those oppressed which are of black colour. This makes an ill report in all those countries of Europe where they bear, that the Quakers do here handel men as they handel there the cattle. And for that reason some have no mind or inclination to come hither.” “Have these negroes not as much right to fight for their freedom as you have to keep them slaves?”

The paper is signed by Garret Henderick, Dirck op den Graeff, Francis D. Pastorius and Abraham op den Graeff.

Considering that Pastorius, in literary ability, far outstripped all other residents of Germantown, it is fair to presume that he penned it, undeterred by the difficulties which the foreign idiom still presented to the expression of his ideas. As a corollary to

* Where is it now?

† Bowden's *History of the Society of Friends in America* (vol. ii, p. 143, etc.) and Michealli's *Retrospect of Early Quakerism* (p. 332) give the document unabridged.

the sentiments of his protest, some of his verses, which are not less telling than his prose, may be introduced here:

"If in Christ's doctrine we abide,
Then God is surely on our side;
But if we Christ's precepts transgress,
Negroes by slavery oppress,
And white ones grieve by usury,
(Two evils which to Heaven cry),
We've neither God nor Christ his Son,
But straightways travel hellwards on."

In the meantime the honest labor of the industrious pioneers of Germantown was rewarded with reasonable success. With pleasure Pastorius saw the little settlement, which with his learned humor he occasionally dubbed Germanopolis, emerge from the difficulties of its early struggles and become more and more dotted with happy homes. The inhabitants were nearly all tradesmen, mostly weavers, who varied their in-door work by clearing the land and cultivating their fifty acre farms. Their manufactures, such as they were, found a ready market in Philadelphia, where the Frankford company had a depot for the storage and sale of goods. The very year after their arrival, in 1684, specimens of their industry were exposed for sale, and this is the account which Pastorius gave of the first *season*:

"There was a fair at Philadelphia, on the 16th of November, but in the company's storehouse little over 10 thalers were realized owing to the said scarcity of money, and because the fresh immigrants from Germany and England, generally bring clothes enough to last them for several years."

In the year 1692, Richard Frame wrote, and William Bradford printed, *A Short Description of Pennsylvania* in doggerel rhymes which takes due notice of Germantown, referring to its industry in the following lines:

"The German town of which I spoke before,
Which is at least in length one mile or more,
Where lives High German people and Low Dutch,
Whose trade in weaving linen cloth is much,
There grows the flax, as also you may know,
That from the same they do divide the tow.
Their trade suits well their habitation—
We find convenience for their occupation."

Nor does Gabriel Thomas, writing in the year 1698, overlook his early promise of American industry in Germantown. His remark is: "All sorts of very good paper are made in the German town, as also very fine German linen, such as no person of quality need be ashamed to wear."

Viewing the results of well applied labor, and observing how the brawny arm of the workman, the skillful hand of the artisan, were gradually transforming the "howling wilderness" into the pleasant features of a German village, Pastorius advised all his friends, who might wish to send their children to America, by all means to teach them a trade, and then, perhaps for a moment forgetting that intellectual culture, soaring above grovelling necessity, has rights and rewards which are incommensurable with the wants of the hour, he gave vent, somewhat crestfallen, to this ejaculation: "As for myself, I would now give one hundred rix thalers and more, had I spent the precious time consumed in studying Sperling's physics, metaphysics, and other useless sophistic *argumentationes* and *argutiones*, upon learning engineering and the printer's art. This would serve me better now, would be more useful and agreeable both to myself and my fellow-Christians, than the said *physica* and *metaphysica*, the Aristotelian *elenchi* and *sylogismi*, through which no savage and no unchristian man can be brought to God, and which much less will help to earn a crust of bread."

But in spite of such repining Pastorius never became an utilitarian, in the baser meaning of the term; through all his life he retained the tastes and industrial pursuits of a scholar. In fact, as a bookworm he had probably not his equal in the Province. As regards his children, he was, however, as good as his word. It could not have been without his approval that both his sons became mechanics.

In this connection, a few words will be *à propos* concerning his domestic affairs, of which very little is known. He was a single man when he came to Pennsylvania, while most, if not all, of his first friends and companions immigrated with families. On the 26th of November, 1686, he married Enneke (Anna) Klostermann, daughter of Dr. Johann Klostermann, of Mühlheim, by whom he had two sons, John Samuel, born March 30th, 1690, and Henry, born April 1st, 1692. Through these the blood and name of

Pastorius have descended in a double line to the present day.

That interesting episode in the history of Germantown, which is connected with its organization as an independent municipality, is so well known, through *Watson's Annals* and other accessible books, that little space only need be devoted to it here. It was just one hundred years before Germantown came so wonderfully near being chosen the capital of the United States* that, by virtue of a charter granted by William Penn (Aug. 12, 1689), it was vested with all the rights and privileges of a municipal town. The patent received the royal sanction, under the great seal, May 3d, 1691, and in the same year Germantown entered upon its proud but brief career of self-government, by choosing, for the first time, a city corporation, which consisted of a bailiff, three burgesses, a recorder, a clerk and a sheriff. The officers for the first yearly term were, F. D. Pastorius, bailiff; Dirck op den Graeff, Herman op den Graeff and Jacob Fellner, burgesses; Jacob Isaac von Bebber, recorder; Paul Wulff, clerk, and Andress Souples, sheriff. Jan Lucken became constable, the only one required.

Pastorius, with that reverence which graced every important step of his life, selected a number of suitable scripture passages inculcating justice, the fear of the Lord and charity as mottoes for the book destined to contain the court records. The corporation seal, adopted upon his suggestion, had for its device a trefoil exhibiting upon its three leaves a grape, a flaxblossom and a spool with the legend: *Vinum, Linum et Textrinum*. According to his own interpretation, he thus wished emblematically to foreshadow the mission of the Germans in the land of their adoption, grape-culture, farming and industrial pursuits. The sessions of the court were held in the Friends' meeting house. To judge by an abstract of the proceedings (printed with innumerable misspellings of the names, in *Collection of the Historical Society*, Nov. 1852), Pastorius might as well have chosen for the device of his seal an *Astræa Redux*, so harmless and halcyonic must have passed the days of old Germantown. There were two court sessions every three months, and quite frequently it happened that the court was adjourned for want of business, or because the magistrates wished

*See *Independent Gazette* of October 3, 1789.

to attend some religious meeting. Once a trial was postponed upon the defendant reminding the court that it was the day on which Herod slew the Innocents. The liquor law of Germantown, in a manner not known in later days, contrived to harmonize the claims of temperance and human nature by forbidding "to sell more than a gill of rum or a quart of beer *every half day* to each individual." An offender against the law, who must have known the maxim of Protagoras, that man is the measure of things, tried to justify his violation of the statute by submitting that one man can stand more than another, but "the bailiff told him: henceforth thou shalt sell no more drink." (*Coll. Hist. Soc. I. c.*) The accounts of the annual elections show that there was considerable rotation in office; this was due, however, not to an excessive supply of candidates, but rather to an unwillingness of the incumbents to bear the public burden for a long period. Pastorius was bailiff in 1691 and 1692. After that time he held almost uninterruptedly the office of clerk, for whose duties probably no one could be found so well qualified as he.

The privileges which the freemen of Germantown were accorded by virtue of their charter, may have gratified their pride and independent spirit; but this pleasure had one drawback, and that a serious one; they found they had paid dearer for their whistle than they had reckoned. While defraying the expenses of their own improvements, they thought it unjust that they should be taxed for similar improvements in other parts of the county. Pastorius, therefore, laid the subject, in 1701, before William Penn in a letter, which contains this passage:* "Next to this, dear governor, be pleased to call to mind that in the year 1689 thou wert as favorable to the aforesaid Germantownship as to grant unto the same considerable privileges, which not only thus with due thankfulness have been received by the persons therein incorporated, but likewise are at this very moment of time enjoyed by us, their successors, with all imaginable gratitude. On the other hand, a few of our neighbors (according to the old poet's saying: *Vicinumque pecus grandius uber habet*), did, and, may be, still do, think our German nation to be smiled on beyond

* See the (unprinted) letter of Pastorius to William Penn in the Logan Papers, Historical Society of Pennsylvania.

desert or measure, especially because we hitherto construed the said charter after the plain words and the true meaning thereof most beneficially for us, the grantees, refusing to pay those taxes, levies and impositions which the county courts do lay, as necessity requires, on those under their jurisdiction. For, being by said charter exempted from jurisdiction of the county court of Philadelphia, having our own Court of Record, as well as our General Court, we cannot but believe that we are freed from all charges toward the said county, seeing it would rather be a burthen than a privilege to pay both the county taxes and also the taxes of our corporation. As for the provincial taxes, we never made any exception, but were always, and still are, willing to contribute thereunto according to our abilities, as good and loyal subjects."

The petition was laid before the Provincial Council and discussed on the 5th of March, 1701, but the colonial records give no clue as to the disposition made of it.

The corporative existence of Germantown closed in the year 1707; not, as has been asserted (*Hazzard's Register of Pennsylvania*, ii., p. 280), because no persons were found willing to serve as officers, but through the interference of the Queen's Attorney, George Lowther, much to the chagrin of the people of Germantown, who thought themselves wronged.

In the year 1700, Pastorius, agreeably to his own desire, was relieved of his trust as agent of the Frankfort Land Company. Incredible though it may sound in our days, for his seventeen years and five months' service he received neither salary nor compensation of any sort, but had, on the contrary, been put to considerable outlay in behalf of company, for which he was not reimbursed. The document accrediting the successors of Pastorius* announces the change in the following words: "And yet, because of the death of some of the heads of said company, and the interruption of the French war, as also chiefly because of the absence of the Government and indisposition of the said our Factor, those our affairs in the said Province are come to a stop, the aforesaid Mr. Pastorius having also desired by and in several of his letters to be discharged of the administration, we for such do confer full power and special authority on Mr. *Daniel Faulk-*

*Printed in the *Collections of the Hist. Soc. Penn.*, i., p. 273.

ner and *Johannes Kelpius*, as inhabitants for the present in Pennsylvania, as also on *Johannes Jawert*, etc."

The newly appointed agents were, with the exception of Jawert, not judiciously chosen. Kelpius was that curious personage known as the Hermit of the Wissahickon, the spiritual head of a mystic league called the "Woman of the Wilderness."* He never troubled himself about the appointment. Faulkner, who came with Kelpius, in 1694, was, like him, a Chiliast, but quite willing, before the Millenium opened, to do as the Romans do. Unfaithful to his charge, he lent his aid to a fraudulent scheme of one Henry Sprögel, who, about the beginning of the year 1709, alleged that while in Europe he had bought out the Frankfort Company's interest in their Pennsylvania possessions, that the bill of sale had been "taken by the French," and who succeeded, by some legal hocus-pocus—*fictio juris*, Pastorius terms it—to get, January 13, from the county court of Philadelphia, a writ of ejectment against the napping tenants of the company.

The distress among the peaceful inhabitants of Germantown was great, and like chickens frightened at the approach of a hawk they came fluttering to Pastorius and implored his good services. These he readily promised, and on the 22d of February he hastened to Philadelphia to encounter the conspiracy of Falkner and Sprögel, above all to engage counsel. But here he found himself forestalled. The tricksters had, much to the disgust of the righteous Quaker, *fed and retained the four known lawyers of the Province*.† THE FOUR KNOWN LAWYERS! Well might Gabriel Thomas say: "Of lawyers and physicians I shall say nothing, because this country is very peaceable and healthy. Long may it so continue, and never have occasion for the tongue of the one nor the pen of the other, both equally destructive," etc. (*Account*

*That the management of important worldly affairs should have been entrusted to this dreamy mystic is strange enough, and would be unaccountable, did not the signature of Dr. J. W. Petersen, as one of the members of the company, throw a ray of light on their strange choice. Dr. Petersen is well known in the annals of eccentric theology. He was, like Kelpius, a Chiliast, and altogether of the same stripe. What is more probable than that they were friends?

†At an earlier period Pastorius had been crossed in the same manner by Wigord Levering. See Horatio G. Jones' *History of the Levering Family*, p. 7.

of Pennsylvania, 1698, p. 32.) Well, the mischief had been done, the four lawyers, ready enough *mercedem imponere linguæ*, were committed to Sprögel's side, and Pastorius, as he himself piteously declares, too poor to go to New York for another counselor. In this predicament he applied to his friend, James Logan, for advice, obtained a copy of the court proceedings, and laid the whole matter, in the form of a petition, supported by a similar one from Johannes Jawert, before the Provincial Council. Here the "heinous" plot received a thorough ventilation, and the Council granted an order which restrained the bold conspirators. (See *Colonial Records*, vol. 2, p. 430 and 431.)

As Pastorius never derived any income from the Frankford company for his services as their agent, what were the means of his support? Being a man of high legal attainments and strictest integrity, he was of eminent usefulness to the settlers as their adviser in all law and real estate transactions, and did a business best compared to that of conveyancer and notary public, executing legal instruments of every description, such as leases, mortgages, articles of agreement, indentures, titles, attachments, releases, deeds of sale, bonds, warrants, testaments, certificates of marriage, contracts, powers of attorney, petitions, inventories, to which may be added the writing of private papers, letters, bills, translations, etc. Of all this his cash book from 1701 to 1719, gives a full insight. His charges were moderate: for executing a lease, title, bond, testament, etc., 2-3 shillings; for a deed of sale on parchment 7-9 shillings; for a bill, letter, etc., 4 pence. (Wages were then, for a common laborer, 2 shillings a day, the cost of a bushel of wheat, 3-4 shillings, of buckwheat, 4 shillings, a pound of beef 3-4½ pence, a pound of butter 6-8 pence, a yard of linnen, 4½ pence.) His earnings from this source were, in fact, not sufficient to support his family, and indefatigably industrious as he was, he pursued for the last twenty years of his life the honorable calling of a school teacher.

A kindly interest very properly attaches itself to the first efforts made in behalf of education, and to the beginning of literature in our State. The curious eye watches with pleasure the distant rills and rivulets, which, in course of time, have become a magnificent stream. It is therefore a pleasant surprise to meet

Pastorius, the founder of the first German settlement in America, the author of the first anti-slavery document, as a laborer in both fields, the scholastic and the literary, and the honors due to him on this score are the more readily pointed out, as the fact seems hitherto to have been overlooked.

A letter (in possession of Col. Frank M. Etting), written by Mr. Phineas Pemberton to F. D. Pastorius, to excuse the lateness of his daughters, and an answer to it, acknowledging "the good disposition of the two little ones, and that the very shadow of the rod will do more with them than the spur with others," both dated the 12th of 2d mo., 1698, leave no doubt that Pastorius then conducted a school in Philadelphia. Letters of his children to their grandfather in Germany, written about a year later, show that the family had removed to Philadelphia, and that their house in Germantown stood vacant.

Whether Pastorius was connected with the "Friends' public school" in Philadelphia, which was founded in 1689 and chartered 1697, or whether he conducted a private school on his own responsibility, could not be ascertained by the sources of information which are now accessible. The former supposition seems to be at variance with the statement of R. Proud, that G. Keith was the first master and that Thomas Makin succeeded him, while, on the other hand, it is unlikely that, at so early a period, two schools were patronized by Quakers simultaneously. Pastorius did not stay long in Philadelphia. In 1697 he was still dating his letters from Germantown, and in the first or second year of the new century he was there again as the head of a school.

This Germantown school was supported partly through voluntary subscriptions, partly by charges for tuition. The overseers, acting for the year 1702, were Aret Klincken, Peter Shoemaker and Paul Wulff. The contributors of that year were: Anton Loop, Peter Shoemaker, Paul Wulff, Jacob Delaplaine, Jonas Potts, Isaac Shoemaker, Walter Simons, Levin Herberdink, Johann Bleikers, Dirk Jansen, Johannes Umstett, Heifert Papen, Jan Lensen, Peter Bon, Herman Bon, Dirk Keyser, Claus Temsen, Gerhard Ruttinghusen, and two others whose names could not be deciphered.

The school was attended by children of the following parents: Aret Klincken, Reinert Tyson, Tunes Kunders, Wm. Strepers,

Paul Kästner, Reinier Hermans, Abraham op der Graeff, Christian Warmer, Arnold van Vossen, Johannes C. Codweis, Cornelis Sivert, Aret Küster, Jan Doeden and Lenert Arets. Similar lists covering the following years contain the names of all the Germantown worthies who enjoy a local fame for merits of their own, or of their descendants.

The impulse for establishing the school in Germantown was given by the Quakers, and it was in some measure considered as theirs, though persons of other creeds also, *e. g.* the Mennonites, Dirk Keyser and Jacob Gottschalk, belonged to its patrons. From Pastorius' private memoranda, it appears probable that the school continued at least till 1718, if not to the time of his death in 1719.

Reference has been made to the writings of Pastorius. Though the general reader may ignore them as unimportant, a short account of them will not be unwelcome to the antiquary and to all who feel some interest in the man who penned them.

The following was printed:

1. The inaugural dissertation *De rasura documentorum*. Nuremberg 1676.

2. A primer. In the minutes of the Philadelphia Quarterly Meeting it is recorded that in 1697 a supply of "Pastorius' Primers" was obtained for the Philadelphia, Haverford and Dublin meetings. Sales of the same primer (eighteen pence a piece) are frequently entered in Pastorius' cash book. This is probably the first school-book printed in Pennsylvania. Cannot a copy of it be discovered?

3. The first book written in Germantown, but printed in Germany, is a treatise by Pastorius on four subjects of ecclesiastical history, viz.: The Lives of the Saints; The Statutes of the Pontiffs; The Decisions of the Councils of the Church; The Bishops and patriarchs of Constantinople. That such should have been the *primitia* of Germantown authorship is curious enough. The book is written in German; the place of publication not mentioned. It is dedicated to Pastorius' teacher, Tobias Schumberg, by a kindly worded address, which closes: "From Germanopolis, lately founded by me in Pennsylvania and now thriving successfully A. D. 1690."

The *Description of Pennsylvania*, a little volume written in German, published at Frankfort and Leipzig, 1700 and 1702. As

the book contains a number of authentic letters written between 1683 and 1699, in Germantown and Philadelphia, it is justly prized as an important source of early information.

Far more numerous than his printed books, were his manuscripts compiled with unwearying patience and scrupulous neatness. A list of their titles in Pastorius' own handwriting shows their whole number to be 43 volumes, viz.: 1 in folio, 14 in quarto, 22 in 8vo., and 6 in duodecimo. They cover a wide range of subjects; some are manuals of school branches, others treat of theology, economy, farming, useful science; others again contain original poetry in English and German. Few of these laborious compilations have escaped the ruthless wear of time and neglect; the most curious of all, however, the huge folio entitled "Francis Daniel Pastorius, his Hive, Beestock, Melliotrophium Alucar or Rusca Apium," is still in existence and now in the possession of Mr. Washington Pastorius, of Germantown. This is an old curiosity shop of a book, a Pastorian cyclopedia of useful knowledge and nondescript fancies, a medley of history, proverbial philosophy, quaint conceits, treasured experience and original poetry. This "Bee-hive" with its innumerable cells, is a ponderous folio of 1,000 pages, with about 100 lines to every page, written with almost microscopic minuteness. It was intended to supply his two sons with profitable and healthy reading.

"Dear children, come and look
Often in your father's book—
Not only look, but understand,
For learning's more than house and land;
The house may burn, the land be spent—
True learning never has an end."

Most of the poetry, which he labels—as though an excuse were needed—"Poetical Raptures," with the motto, "*Semel insanivimus omnes*," would bear being printed; there are many happy sentiments, pithily expressed after the fashion of gnomic verses. The larger part is written in English. Then comes German and Latin; occasionally he uses the French and Dutch; from the Italian and Greek we find quotations. With these seven languages Pastorius was quite familiar. Here is a specimen of his punning Latin, though we doubt whether the orchard pilferer to whom the lines were addressed, saw the point:

*"Quisquis in haec furtim reptas viridaria nostra
Tangere fallaci poma caveto manu,
Si non obsequeris faxit Deus omne quod opto,
Cum malis nostris ut mala cuncta jeras."*

Very adroit he was, too, in turning off rhymed Latin verses of quite a rich swell. A longer poem of this kind, printed in the *Description of Pennsylvania*, thus begins:

*"Vale mundi gemebundi colorata gloria,
Tua bona tua dona sperno transitoria.
Quae externe hodiernae splendent pulchra facie,
Cras vanescunt et liquescunt sicut sal in glacie."*

So considerable a portion of his poetry is of a bucolic strain, devoted to the pleasures of gardening, to the description of flowers and the care of bees, that it sheds a reflected light on the man himself, as finding in these genial pursuits cheer and relief from the arduous labors of office and school. When his neighbor, the famous Dr. Christopher Witt, removed his flower beds close to the fence that bordered on Pastorius' garden, the latter expressed his joy at this complaisance in graceful lines.

It has been stated, in another part of this paper, that Pastorius owned 200 acres of land on Chestnut Hill. An extract from his private papers may show what became of this magnificent stretch of ground, and it will show, at the same time, how uninterested, nay, indifferent, he was to worldly acquisitions, to a fault:

"As regards landed estates," he says, "I never was eager after them, because the way to Heaven does not lead through them. Still I accepted the 200 acres, which William Penn awarded to me, in the German township. I located them in Sommerhausen, and sold them unwisely (1695) to Wm. Strepers and Abraham Tunes for 40 pounds, which I mostly spent in behalf of the Frankfort Company."

During the thirty-six years of His life which Pastorius spent in Pennsylvania, he was rarely sick. A severe fever, which prostrated him in 1685, left him little hope of life. In 1713 a tedious sore confined him to his bed, and he whiled away his time by writing a discursive treatise, viz.: "Good Counsel to Bad Lawyers and Attorneys."

Again, 1717, he had to interrupt his scholastic duties in consequence of a cold affecting his lungs, by which he was brought

to the edge of the grave. He received the kind attention of Griffith Owen, Richard and Hannah Hills, Samuel Preston, Isaac and Mary Norris, and of his German friends. Being well acquainted with the medicinal powers of plants, and familiar enough with therapeutics to write a Domestic Physician ("*Medicus dilectus*"), he did not often resort to doctor and apothecary. All the expense that he entered on this account in his cash book, during a period of twenty years, is exactly three shillings! The precise date of his death cannot be ascertained. He made his last will when "very sick in body," on the 26th of December, 1719, and it is probable that he died before the close of the year. The will was proved by the witnesses, Dirk Jansen, Cunrad Cunrads and George Bringhurst, on the 13th of January, 1720.

No tombstone, not even a record of burial, indicates where his remains have found their last resting-place, and the pardonable desire to associate the homage due to this distinguished man with some visible memento cannot be gratified. There is no reason to suppose that he was interred in any other place than the Friends' old burying ground in Germantown, though the fact is not attested by any definite source of information. After all, this obliteration of the last trace of his earthly existence is but typical of what has overtaken the times which he represents; *that* Germantown which he founded, which saw him live and move, is at present but a quaint idyl of the past, almost a myth, barely remembered and little cared for by the keener race that has succeeded.*

OSWALD SEIDENSTICKER.

*A more extended notice of Pastorius' life, and the settlement of Germantown, was given by the writer of the foregoing article in a number of papers last year contributed to the *Deutsche Pionier*, a monthly published in Cincinnati.

VACCINATION—ITS USES AND ALLEGED DANGERS.*

BY JOHN S. PARRY, M. D.

IN the official announcement of the meetings of the Social Science Association it was stated that I would read a paper upon "The Uses and Abuses of Medical Charities," in March next, but it being inconvenient for the gentleman who was to address you this evening to be here, I have taken his place. At the suggestion of the chairman of the Committee on Public Health I have also changed my subject, an alteration which has not seemed inappropriate, on account of the fearful epidemic of small-pox which is now prevailing in our midst. This has swelled our mortality to enormous proportions—jeopardized the lives of a large number of our citizens; spread fear and sorrow throughout the community, cost the city thousands of dollars, and injured business more, probably, than the general public is aware.

In the middle of September, 1871, it first began to be apparent that the disease was on the increase, and that the grave suspicion which physicians had for some time entertained that it was about to become epidemic, would soon be realized. As has been usual with other epidemic diseases, this found our health authorities totally unprepared for its reception, and to-night we can look back over a long array of broken home circles, and sum up our bitter experience—an experience which is the more distressing because a large number of the lives lost were sacrifices on the altars of mismanagement, prejudice and ignorance.

During the last century, and before the introduction of vaccination, about thirty-five per cent. of all those stricken with small-pox perished. It is asserted by Dr. Welch, physician to the Municipal Hospital, in the number of the Philadelphia *Medical Times* which I received to-day, that during the present epidemic about twenty-one per cent. of all the reported cases have been fatal. This mortality, with our present means of protection, is too high by at least fifteen per cent.; for, as we are now able to

* Read before the Philadelphia Branch of the American Social Science Association.

modify it, small-pox is one of those affections which is almost under human control, and a majority of the lives lost by it are wanton sacrifices for which the public authorities should be held publicly responsible. We do not hesitate to say that we think that the grand conception of the immortal Jenner, that the disease might be stamped from the face of the earth, was not so far wide of the truth as his opponents would have had us believe.

If we survey the sickening record of mortality for Philadelphia during the past four months, we find that, while during the week ending September 9, 1871, only one death occurred from variola, those from the same cause during the week ending December 2, 1871, had reached the fearful number of two hundred and thirty-three persons. Yet we find some of the public papers, even after this, disclaiming that there was any cause for serious alarm in the community. That more than two hundred human beings died of small-pox in Philadelphia in one week, now when we are on the threshold of the twentieth century, is a startling fact, and furnishes a strange commentary upon our progress in learning and civilization; but it is a still more startling fact that the public press, and the city authorities, who ever profess to have the public good at heart, should have deemed this but a slight cause for alarm. That between the 1st day of September, 1871, and the 18th of January, 1872, 2,086 persons died of a strictly preventable disease, in this enlightened city, and that this was nothing remarkable, according to the sanitary gospel of certain commercial authorities, is something which physicians and other scientific men cannot appreciate. Truly the estimated value of human life is a very low one, when it can be thus quietly summed up in dollars and cents by commercial authorities and miserly money-changers. What a dark commentary on our boasted humanity we present—what a sordid testimony to human avarice we furnish—what an unenviable example we hold up to the civilized world! Certainly the republic but lightly estimates the value of its citizens!

Let us for a moment contrast the epidemic in Philadelphia with that in London. During the week ending October 29, 1870, according to the record of mortality published by the *Medical Times and Gazette*, twenty-one persons died of small-pox in the

latter city. From this time it gradually increased until the week ending May 6, 1871, when the death-rate from the disease had reached its acme, two hundred and eighty-eight persons having perished from it during the previous seven days. This is only fifty-five in excess of the highest weekly mortality of Philadelphia, while our population is only 674,000, and that of London is about 3,251,804, or nearly five times ours. But this mortality from variola alarmed all London, and citizens and municipal authorities united to quell the epidemic. The public money was freely expended—new hospitals were erected, additional relieving officers and sanitary inspectors were appointed, extra vaccine and poor physicians were called into active service, and the public carefully vaccinated.

Of the various measures for the prevention or arrest of this disease, the one which most interests us to-night is vaccination. The history of this is one of the most interesting and remarkable subjects in medical literature, and it may not be amiss to refer to it in this place. The name which is indissolubly associated with it is that of Jenner, but there is another which with his should become a household word.

In the churchyard at Yetminster, in Dorsetshire, England, is a tombstone on which is the following inscription: "Sacred to the memory of Benjamin Jesty, who departed this life on the 16th of April, 1816, aged 79 years. He was born at Yetminster in this county, and was an upright, honest man, particularly noticed for having been the first person (known) who introduced cow-pox by inoculation; and who from great strength of mind made an experiment from the cow on his wife and two sons, in the year 1774." Jesty was a farmer in Gloucestershire, England, and Mr. Haviland says, that if we may believe the portraits of him, he was a good specimen of an English yeoman. In 1805, he made good his claim to having been the first person who performed this experiment before the medical officers of the Original vaccine pock institution at London, and at the same time "Mr. Robert Jesty, very willingly submitted publicly to inoculation for the small-pox in the most vigorous manner, and Mr. Jesty was also subjected to the trial of inoculation for cow-pox, after the most efficacious mode, without either of them being infected." Mr. Jesty seems to have been a man of peculiar mental power, for he performed

this operation without a precedent, having come to a knowledge of the fact that cow-pox inoculated into the human subject, would prevent small-pox in the same manner that Jenner did. (*Lancet*, September 13th, 1862).

The recognition and acknowledgment of Jesty's part in the discovery of vaccination does not lessen the debt of gratitude due to Jenner; for he, without any knowledge of the labors of his fellow-countryman, conceived the same great idea, and it was through him that it came into general use. While an obscure apprentice to a surgeon, at Sodbury, near Bristol, England, he heard the common report among the people that cow-pox inoculation on the hand would prevent small-pox; and at this time he seems to have got his first glimpse of the great truth. A little later, when apprenticed to the famous John Hunter, in London, he mentioned his conviction to him, but the great master scouted at the immature idea of his now immortal pupil, so that it was not until the 14th of May, 1796, just twenty-two years after Jesty vaccinated his wife and two sons, that Jenner was able to perform his first experiment. If Seaton is correct, however, this was thirty years after he first conceived the idea at Sodbury, when a young country woman told him, that she could not take small-pox, "for she had had cow-pox." What weary waiting it must have been, during these thirty years, and with what intense anxiety he must at last have watched the result of his experiment! With the point of his lancet he that day carved for himself a never-dying fame, and with the flow of those few drops of warm life-blood he had given to the world a rich legacy, the discovery of which was the result of no happy accident, but followed one of the best examples of inductive reasoning with which the history of medical science furnishes us. Thousands and tens of thousands of persons now live, whose presence on earth this day is due to his discovery, and it may be, and no doubt is, true that many of you who are now listening to me have only lately received a new lease of your lives through the boon which he has given us.

Jenner's first publication of his experiment was made in 1798, after which vaccination gradually came into general use, and the practice of inoculation was discontinued. In 1841 the latter was forbidden by law in England, and in 1852 vaccination was made

compulsory. Late English journals say that it is now proposed to raise some monument, to commemorate his discovery, at the church which is near his birth-place; but a better and more enduring epitaph has been engraved with the point of the lancet, upon the arms of countless happy children, strong men and fair women.

In discussing the various questions relating to vaccination it is desirable, in a popular discourse like this, to treat only of those things about which the best authorities in medicine are entirely decided, and those about which the public entertain some unfounded prejudices. We shall endeavor to thus limit ourselves in the sequel, premising that we shall attempt to promulgate no new views, but rather to present a summary of what is really known in regard to the subject.

Jenner taught that the cow-pox, a peculiar disease in the horse, and the small-pox in the human subject, were one. He seems to have thought that man derived the disease from the horse or cow, and that in his system the virus had undergone some inscrutable change by which it had acquired a malignant form, which causes it to produce the devastation that we have so lately witnessed in our own community. Whatever may have been the origin of variola in the human family, whether man derived it long since from the inferior animals or they from him, there seems to be but little doubt—a statement to which Seaton and Ballard, in their respective works on vaccination, lend their authority—that the equine, the bovine and the human disease have their origin in one and the same specific virus. Jenner was wrong, however, in supposing that the matter taken from the “grease” in horses would protect the human subject from small-pox when he had been inoculated with it. The horse suffers from a peculiar affection which should be called equine variola, and it is the lymph taken from this which will produce genuine vaccine disease in man, and cow-pox in cows, which, in its turn, can be transmitted to the human subject in whom it will prove protective.

For a long time it was doubtful whether variolous matter taken from the human subject and inoculated into the cow, would produce variola or genuine cow-pox. French authorities asserted the former, and Trousseau, even in the last edition of his works, warns

against the use of such matter, because he says it produces true small-pox.

Seaton, however, has pointed out the fallacy of the experiments of Chanveau and other French investigators, upon which these statements were based, while Gassner, in Germany, Ceely and Badcock, in England, in 1839 and 1840, and Adams and Putnam, in America, in 1852, proved by direct experiment that small-pox virus will produce cow-pox when cows are inoculated with it. They all proved likewise that when the lymph thus generated was inserted into the human subject, it produced, not variola, but vaccine disease with its protective influence. Large numbers of persons have been vaccinated in England, with lymph of this kind. Seaton says that Mr. Badcock alone has performed more than 20,000 vaccinations with it. This is an important fact, when we remember that comparatively few American physicians have any practical knowledge of bovine variola, and that Trousseau, unacquainted with the English experiments just mentioned, denies entirely that true bovine variola, can be generated by the inoculation of small-pox virus into the cow.

It will be noticed that there are some very important differences between the equine and the bovine and the human variolæ. The last is an eminently contagious disease. It may be transmitted from one patient to another not only by inoculation, but also by the inhalation of its specific effluvia, or as it is commonly called, by contagion. Thus generated it always produces a disease like itself, with a general eruption, and transmissible through the same channels. It may be given to the cow by the emanations from the human subject. Ceely saw it thus transmitted by accident in 1840, and ten years before that time Sonderland, of Barmen, obtained the same result by direct experiment. He enveloped the cattle in blankets taken from the beds of variolous patients. In these cases, however, the cows were not affected with a general, but with a local disease, the ordinary bovine variola.

On the other hand, horse or cow-pox is not transmissible from one animal to another by contagion, but only by inoculation, and only through the same channel can man receive it from the lower animals. Moreover, in kine it never produces a contagious affection, but retaining its true bovine or equine character, it is only transmissible from one individual to another by inoculation.

We have, therefore, three channels through which members of the human family may receive vaccine disease. These are, first, from the horse, second, from the cow, and third, from the human subject, by the transmission of virus which was humanized at the time Jenner commenced his experiments, or at various periods since that time. The first two of these sources may be discussed together. It is so rarely that any one attempts to obtain or use the lymph derived from the horse, that the consideration of its peculiarities is a matter of very little importance. Popular prejudice, which, for want of proper knowledge, has been too much fostered by some members of the medical profession, has made the community look to a supply of bovine virus as affording additional and more certain protection against the infection of human variola. In determining the truth in regard to this matter, it is to be remembered that the transmission of any specific or zymotic disease from an animal of one species to an animal of another species, is a matter of considerable difficulty, and that, though the individual receiving the virus may be susceptible to its influence, it may have to be inoculated several times before it produces its effects. The early investigators of this subject experienced great difficulty in transmitting the equine disease to the cow, and this aside from the uncertainty whether they had obtained good lymph or not. So Ceely, Badcock, and others, witnessed many failures in their attempts to produce cow-pox by inoculation of variolous matter. In accordance with the same law the transmission of the cow-pox to man is by no means certain. The inoculation frequently fails. Ceely was successful in only about fifty per cent. of his cases, and M. Husson in only a little over sixty-two per cent. Moreover, success which is not entirely complete—and such an expression may be legitimately employed—is more common after the inoculation of bovine than of human vaccine virus.

When the present epidemic made its appearance in Philadelphia, it found the public unsupplied with the necessary quantity of reliable vaccine matter. The profession naturally turned to the cow for a fresh supply, a suggestion which met with a most hearty response in the community. It was not long until many persons, partly because they deemed the protective power of bovine variola greater than that of human vaccine disease, and partly from the ignorance and cupidity of the homeopathic school

of physicians, were demanding that they be vaccinated with no other material, not knowing the uncertainty of bovine inoculation.

Shortly after the epidemic appeared here, bovine virus of three kinds could be obtained in the city. One was a foreign article, and utterly worthless; the others were furnished from Boston and New York. The speaker tried them all, and was fairly successful with the Boston virus, but failed with the New York, though the fairest promises were made at the time of its introduction. I am assured by other physicians that they have had the same experience with it.

The difficulty in transmitting it, and the uncertainty in the action of the cow-pox, may very justly be urged against its substitution for humanized virus. We do not hesitate to say, that had we been exposed to the contagion of variola without having been protected, we would elect to be vaccinated with good ordinary vaccine matter, in preference to that which is derived from the cow or horse. It may further be urged against the introduction of bovine lymph that it is very severe in its action. While the sorest arms which the writer has ever seen, have been produced by humanized virus, there seems to be no reason to doubt the statements of authors that the results of cow-pox inoculation are much more severe than ordinary vaccine disease. These objections are not counterbalanced by the dangers which attend the use of the ordinary virus.

Humanized lymph presents many striking peculiarities. After bovine virus has been transmitted through the systems of several members of the human family, it becomes much milder in its effects and much more certain in its results, without having lost any of its specific qualities. This modification is a very strange one. Marson, of England, a high authority on vaccination, says that with good human virus, and after exercising all due care that the vaccinator should not be unsuccessful in more than one in every 170 operations, and that no one should fail oftener than once in every 150 insertions. Of this Seaton says: "We may fairly adopt Marson's rate as the standard below which no vaccinator, vaccinating from arm to arm, has any right to be satisfied with his performances." This of course applies only to primary vaccinations, to which we have as yet entirely confined our remarks.

Contrast these results with those obtained by direct inoculation from the cow to man, in which with due care and though performed by experienced vaccinators, nearly one-eighth of the insertions have proved unsuccessful.

They may also be contrasted with the results of vaccination by some members of the medical profession. Many are satisfied with successes which are quite inferior to these, and though I have no means of proving what I say, I firmly believe that taking the community at large the failures amount to one in fifty instead of one in 150. Among many this is far under the truth, for not a few physicians are satisfied with one failure in twenty, or even one in ten, while a few think they have done well if they fail but once in five cases.

The amount of ignorance in regard to vaccination is truly surprising. Every grandmother thinks herself fully competent to perform it, as well as to select the lymph with which it is to be done, and some physicians look upon it, fraught as it is with so much of good or evil, as a very trivial matter. The result is that the operation is often so imperfectly done that only partial or no protection is afforded the vaccinated.

The general public and the medical profession have at various times earnestly discussed the assertion that vaccine matter has been diluted, or has lost some of its virtues, by transmission through many individuals of the human family. The affirmative side of the question has had many advocates, but the position can neither be supported by argument nor clinical experience. We must look upon the virus of vaccine disease as a specific substance, the nature of which cannot be altered. It would be strange indeed if this were not true, for if it were not, vaccine would form an exception to the laws which govern all diseases of its class. Who ever heard of the peculiar poison of scarlet fever, measles, typhus fever, or even variola itself, being modified by being passed through the systems of human beings? It is true that at certain times and under certain circumstances these diseases differ materially, but the difference is one of degree more than one of kind. So it is with vaccine matter. In its passage from the cow to man it undergoes certain changes, which have already been mentioned, so that it becomes more mild and much more certain in its action. It is this which constitutes the process of humanization, if one

may so express himself, but through this it never loses any of its specific qualities and if the selections have been good and the transmission perfect, the vaccine disease produced to-day by the matter started by Jenner affords just as perfect protection as that produced by virus obtained directly from the horse or the cow.

It will be observed that this statement is made with much qualification, when it is said, the selection of the virus has been judicious and the succession perfect. Vaccine disease, it is to be remembered, is not an affection which is incident to the human family, but it is always acquired, and hence so good an authority as Marson says that its course in man is more easily interfered with than that of disorders which are peculiar to him. This statement is corroborated by general experience, but the cause is a very different matter. There is a very important difference between a loss of protective power which arises from a mere dilution of the virus or its degeneration from transmission through the systems of many members of the human family, and an alteration or deterioration of its properties by subjects who are unfit to transmit the disease and to furnish lymph.

In 1853 Mr. Marson directed professional attention to the fact that in a large number of the vaccinations done in England, the operation was unskillfully performed. The subject was deemed so important that it very shortly afterward claimed official attention, and the medical department of the Privy Council was directed to inquire into the truth of these allegations. They fully supported the statements of Marson, and I have no doubt whatever that his strictures apply just as forcibly to Philadelphia as they do to London, since the general opinion that the operation requires little care and less skill, has become so prevalent. But it does require some skill, much care and nicety of touch, and great judgment in the selection of virus. It is one which only a thoroughly educated physician ought to perform, and one which he is only qualified to perform after some special study and investigation. That this is true, is proved by the fact that during the present epidemic, physicians have met with many young children said to have been vaccinated and protected from small-pox, who presented very imperfect marks or none at all, and in whom upon vaccination the disease ran a nearly regular course. The speaker has met with numerous instances of this kind, and he

cannot believe that his experience has been peculiar and in any way different from that of his professional brethren.

No doubt many of you have marveled at the mortality of the present epidemic of small-pox, and that many of you, skeptical in regard to its merits before, have been ready to cry out against the whole system of vaccination. We beg you not to be too fast here. What has just been said in regard to improperly selected virus and unskillful performance of the operation must be duly considered in estimating the value of vaccination.

It is no doubt true that Jenner and his immediate followers claimed too much for it, and thus brought some discredit upon the operation, but the speaker is convinced that the want of knowledge, which is so lamentably present in later times, has done much more to destroy the confidence of the public in its efficiency.

Jenner believed that the protection of vaccination was as complete as that afforded by small-pox, provided (and this it is very important to remember) it had been properly performed. It is not to be forgotten that he never claimed this protection to be absolute, for so much cannot be said of variola itself. Numerous instances, and fatal ones, too, of second and even third and fourth attacks of the disease are upon record.

It must be remembered that in order to test this question and to settle it beyond dispute, it will be necessary to determine not how many among a given number of vaccinated persons contracted small-pox, but how many among a given number of those who were exposed to it were affected; and not only this, but it may be added that it is not how many who have been vaccinated, but how many who have been *thoroughly and properly* vaccinated and exposed, have been taken ill. This is a question which it will be difficult to decide, but it is at the foundation of all our knowledge upon this subject, and when it comes to be fully and correctly replied to, the speaker has but little doubt that Jenner will be found to have been nearly correct. The lack of faith in vaccination, whether in the medical profession or among the laity, comes only from want of knowledge or imperfect observation, and if any physician finds a considerable number of persons whom he has vaccinated stricken with a serious form of the disease, he may be sure that he has erred either in selecting or inserting the lymph.

We, here in Philadelphia, are to-night paying the penalty of

public and individual carelessness in regard to this matter, and a fearful tribute indeed has been demanded of us. That this is true is proven beyond all question by innumerable statistics. First is the fact already mentioned that, before the introduction of vaccination, about 35 per cent. of all persons attacked by variola died, a mortality which continues among the unvaccinated to this day, while among those who have had the benefit of the operation the death rate for unselected cases has fallen to about five per cent. National statistics as furnished by Seaton prove the same fact. Before the discovery of vaccination the annual death rate from small-pox in Sweden was 2,050 out of every million of the population. During the forty years which ended with 1850, it had fallen to 158. In Westphalia, where it was 2,643 in a million, it has fallen to 114; in Berlin, from 3,422 to 176, and in London from 3,000 to 200. If this is true, with all the imperfections in the manner in which vaccination is done, we can hope for much more when it is properly performed.

The statistics of the British army prove this. Before the discovery of Jenner, small-pox was sufficient to destroy an army, and to drive the vessels of a navy from the seas. In 1858 the British government made it obligatory that every recruit entering the army should be thoroughly vaccinated and revaccinated. The result has been that in the six years ending with 1864, the annual number of cases of small-pox per 10,000 of mean strength has only amounted to 14, while the annual death rate per 10,000 soldiers has only reached to 0.84. Thus the results among these specially protected classes of the community form one of the strongest arguments in favor of vaccination.

The degree of protection varies much with the manner in which the vaccination is done, and especially with the number of insertions that are made. I am particular about insisting upon this point, because I have met with many mothers who strongly objected to more than one, and at most two, insertions being made. I have more than once had them positively refuse to allow me to make more than one puncture. The experience of all authoritative medical men is that the degree of protection is up to a certain point just in proportion to the number of successful insertions of vaccine matter. Four or more genuine vesicles afford almost absolute protection. No child should be vaccinated in less than

four places, and in the performance of this operation no physician should allow himself to be influenced by parental sympathies. Mr. Simon, as quoted by Aitken, has thus tabulated the results of his observations on this point, extending over a period of twenty years, during which time 6,000 cases of post vaccinal small-pox came under his observation.

Class I.—Stated to have been vaccinated but having no cicatrix.....	died	21½ per cent.
“ II.—Having one vaccine cicatrix.....	“	7½ “
“ III. “ two “ cicatrices.....	“	4½ “
“ IV. “ three “ “.....	“	1¾ “
“ V. “ four or more “	“	¾ “
Unvaccinated.....	“	35½ “

It may, therefore, be confidently asserted that that vaccination is the most efficient which produces the largest number of the best cicatrices.

Jenner taught that a person who had once taken cow-pox could not contract it again, and that, as it was essentially variola, he would remain protected from that affection. According to Jenner, therefore, revaccination is not necessary, providing the first insertion was thoroughly and effectually made. This is nearer the truth than the general public supposes. One constantly meets with persons who cannot be made to take vaccine disease a second time, but this is not the rule. Most persons will have a sore arm twice in their lives—during infancy, and immediately after the fourteenth or fifteenth year. Infants are, probably, as susceptible to the contagion of variola as they are to that of any other of the diseases of its class. In late childhood the susceptibility seems to be somewhat diminished, to be increased again after the fifteenth year, and as persons manifest a stronger disposition to take variola from this until the twenty-fifth year, for the same reason they evince an increased susceptibility to vaccine disease during this period. This is not because there is any disposition for the influence of vaccination to wear out in a given time. The popular idea that its effects are exhausted, and have to be renewed every seven years, is unsupported by any facts whatever.

It may be concluded that revaccination is important in the highest degree, and that it should never be omitted after the fifteenth year of life. As it can do no harm, and may do much good, it

should be repeated whenever an epidemic occurs; but if the vaccination and the revaccination have been *thoroughly and efficiently* done, this is less important than most persons suppose.

During the present outbreak of variola the community has manifested much ignorance in regard to this subject. Many seemed to suppose that if one vaccination was useful, several, repeated at intervals, would afford them additional protection. During the last few weeks the speaker has been repeatedly called upon to perform the operation for persons who had, at the very time progressing, though modified vaccine disease. These insisted upon being vaccinated. There are many others who somewhat exultingly tell that they have been vaccinated five, six, or even more than twelve, times before they had sore arms. Such persons have subjected themselves to great anxiety, much trouble and some expense, without having gained for themselves any additional protection. If a person has been perfectly vaccinated in infancy and perfectly revaccinated after puberty, and if after this, two, or at most three, perfect attempts made during an epidemic fail to produce any effect, he need give himself no uneasiness, for he can obtain for himself no additional security.

Because a person has a sore arm after ten or a dozen ineffectual attempts at vaccination he does not necessarily derive any benefit from it, even though the vaccine disease run a nearly regular course. Most persons may be made to have a sore arm if the attempts are systematically made and continued long enough. This is proved by the following facts. The *Société de Médecine*, of Marseilles, estimates that one per cent. of the whole of the variolated portion of the population will have small-pox a second time; and, according to Seaton, one per cent. of the admissions to the small-pox hospital of London have been persons with a second attack. This standard is, at least, near enough to the truth for comparison.

Army statistics furnish us much information in regard to the effects of revaccination on persons who have had the small-pox. In the Wurtemberg army, from 1831 to '35, 319.5, out of every 1,000 soldiers who presented marks of variola took vaccine disease "*perfectly*." In the British army, in 1861, 451.4, of every 1,000 such persons took "*perfectly*." To say that all these were liable to contract small-pox, is simply absurd. So with revaccination—if

the attempts are persisted in, a sore arm may be obtained, but as in many of those who have already had small-pox, it will afford no additional protection.

It is necessary to consider the objections to vaccination with some care. It is asserted that it is injurious to inoculate such a potent poison into the blood. This objection has no foundation whatever. It has been shown that equine, bovine and human variolæ are one. If unprotected, every member of the human family is as liable to have small-pox as he is to have measles, scarlet fever or any other of the eruptive diseases, and probably even more so. If he can receive one of the subtlest and most fatal of all poisons in a modified and much milder form, as he undoubtedly can by means of vaccination, he is silly indeed if he does not accept with a grateful heart the priceless boon with which science has furnished him.

Vaccination is said to have increased the mortality from other diseases. There are no recorded facts which prove the truth of this assertion, but, on the contrary, in those countries where vaccination is most generally resorted to and most thoroughly performed, the total of human mortality has diminished and not increased. It is an old observation that scrofula and consumption frequently follow small-pox, and the experience of the last seventy years has demonstrated beyond dispute that persons may often be saved from these and kindred diseases by preventing variola. From 1755 to 1775 the general death rate in Sweden was 289 per 10,000 of the population. From 1841 to 1850 it was only 205. In London, at the middle of the last century, 355 out of every 10,000 persons died annually, and from *all diseases except small-pox* 325. *Including small-pox* the death rate at the middle of the present century was 249 (Seaton). It is said that other diseases may be inoculated with vaccine matter. Prominent among the affections which it is alleged may be thus transmitted are certain cutaneous affections, scrofula and syphilis. These will be separately considered.

The medical profession has never entertained the opinion that cutaneous diseases can be communicated in this way. The complaints of parents that this has occurred are numerous, arising, as Marson says, chiefly from their unwillingness "to believe that there is anything wrong with their offspring; and when

other diseases follow, vaccination gets blame for what is really and truly due to other causes." Seaton, who has carefully examined many such cases, writes, "I have never yet in a single instance found that the child from whom the lymph was taken was suffering from the disease which it was said to have imparted." Marson, after an experience in 40,000 vaccination, West after 26,000, and Sir William Jenner after more than 13,000, bear the same testimony, employing the strongest terms in committing themselves to the doctrine.

It is unnecessary to say any more in regard to the transmission of scrofula by vaccination. It has been shown that instead of increasing this operation has diminished the tendency to that disease and to pulmonary consumption.

I have now reached that stage in my discourse which must be most delicately handled; but the transmission of syphilis by vaccination is so closely connected with the public good, while the ravages of the disease are so terrible and revolting, that I feel that I would be derelict in my duty if I passed it in silence.

In considering the question it must be remembered that both this and vaccinia are inoculable affections, and that, excepting when the former is hereditary, it cannot be acquired in any other way. They both result from specific poisons, the action of which is governed by laws to which there are but few exceptions as to time of incubation and the course which they run. The latter is very definite in all diseases of this class, and if two poisons are received into the system, the action of one rarely interferes with that of the other. For example, take vaccine disease and unmodified small-pox. They have been made to run their course in the same subject, and persons suffering from small-pox have at the same time presented perfect vaccine vesicles. The lymph taken from these has been used to vaccinate healthy children. It does not produce small-pox, or a hybrid of small-pox and vaccinia, but simple and uncomplicated vaccine disease, with its protective influence. Such virus would not, of course, be selected by the careful physician; but it may be used with perfect safety, provided it is not accidentally mixed with the lymph of the variolous vesicles which are at its side. Is it any more reasonable to suppose that syphilis can be thus transmitted than the still more subtle virus, variola?

Besides this and other theoretical objections, the results of a large experience support the opinion that this disease is rarely transmitted in vaccination. For now, nearly three-quarters of a century, vaccination has been going on in every part of the civilized world, and millions of persons have been protected by its marvelous influence. Certainly sufficient experience has been gathered in all this time to enable physicians to speak with some authority upon this point, and the great mass of them waive entirely the importance of this objection. In 1868 Seaton and Ballard, in their respective works on vaccination, carefully analyzed all the cases which had at that time been reported in which syphilis was said to have been received by vaccination. With a few exceptions they found that they could not bear the test of critical examination.

It must be admitted, however, that the two affections have been transmitted to the same persons at the same time, but it must be remembered that most of these were the consequence of carelessness. The direct experiment of transmitting the disease by using the variolous lymph from syphilitic patients was tried during the time when inoculation was in vogue, and has been repeated with vaccine lymph since Jenner's discovery, and in both instances failed. I think we may therefore conclude that the danger of inoculating syphilis in vaccination is almost wanting, and that it is at least so small that it cannot be used as an argument against vaccination. The usefulness of the latter certainly much more than counterbalances the dangers of the former.

In this brief resumé of the knowledge which we possess in regard to vaccination, we have not attempted to advance any original ideas, but rather to present the conclusions which may be drawn from collected facts. Having shown that the protective power of vaccination is as potent as it ever was, let us inquire why Philadelphia and other cities have been so recently devastated by an epidemic of variola. We shall use London and Philadelphia for comparison, for the simple reason that the statistics of the epidemic have been pretty fully worked up in the former city, while at home we have all watched the progress of the disease from its origin until the present time.

In considering this it must be remembered that since 1853 vaccination has been compulsory in England. In London, during the

third quarter of the year 1870, the weekly mortality from small-pox varied from nine to fifteen. From this time it gradually increased until May 6th, 1871, when the mortality had reached its highest point, 288 persons having died from it during the week ending on that day. From October 1870, to December, 1871, more than 7,500 persons perished from the disease in that city. Two important causes operated to produce the result: 1. A popular prejudice against vaccination, which has become so strong in England that "anti-vaccination leagues" have been organized for the avowed purpose of resisting the law. 2. The indifference of the authorities in regard to the execution of the law for compulsory vaccination. In many of the parishes of London it is asserted that no attention had been given to the matter for some time on account of the trouble necessary to be taken to secure efficient working under the act, and on account of the expense necessarily entailed by general and systematic vaccination.

When the small-pox appeared in London the authorities immediately went to work, and the *Medical Times and Gazette* for February 4th, 1871—a journal not given to praising municipal officers—asserts that "it may honestly be said that never was an epidemic disease met more worthily." When the outbreak occurred it found the city with a small-pox hospital capable of receiving one hundred patients.

In a very short time they had provided accommodations for at least two thousand. When the epidemic appeared we could provide for about one hundred and fifty persons in our municipal hospital. We have now accommodations for double that number, with a weekly mortality nearly equal to that of London, and with every prospect of the disease continuing for a long time. It is probably true that the condition of the poorer classes of this country makes it unnecessary to remove them from their houses so frequently as abroad, but there can be but little doubt that the health of our community has been greatly jeopardized, and the disease propagated to a fearful extent, by the negligence of the Board of Health in inquiring into the sanitary condition of the houses and localities in which the disease existed.

No epidemic affection demands more prompt action than variola. Every house in which it occurs should be thoroughly inspected by our health authorities, and they should know that all per-

sons suffering from it are carefully isolated, and those exposed to it perfectly revaccinated.

The course adopted by the Board of Health in relation to the reports of cases by physicians effectually prevents this being done, and has thrown the responsibility of protecting the community upon the medical profession, to whom the board has most willingly transferred this duty. "Do the premises need a sanitary inspection?" is one of the questions which appear upon their printed forms for reports. A large proportion of the patients among the poorer classes ask and insist that the physician give a negative reply to this question, and there is reason to fear that the relations which he sustains to the family may too often influence the doctor in his answer. We are at least convinced that the decision of this question should be taken from his hands, and that the Board of Health should obtain its own replies by house-to-house inspection.

The truth is that the board has adopted just those regulations which will incommode them the least, and have thrown off on others as much as possible of the labor which they ought to perform.

Early in February, 1871, various parish authorities in London obtained apparatus for the purpose of disinfecting clothing and other materials at high heat. But the Board of Health of Philadelphia has nothing of the kind, and what becomes of infected clothing and furniture taken from houses in which small-pox patients have passed through the diseases, is a very important question. So far as we are aware, this active organization never troubles itself as to what goes on in habitations containing the disease, providing the attending physician gives to this all important question, "Do the premises need a sanitary inspection?" a negative reply. The love of money makes the owner of a palatial residence hesitate long before he throws away an elegant suite of furniture and a set of handsome carpets. We fear that these too often find their way to an auction room or a second-hand furniture dealer. True, by *applying* to the Board of Health they can obtain the favor of having these infected goods removed, and appropriated by the city for its own use, upon the payment of a certain sum. As much trouble and expense as possible is given the public before they can feel that their houses are disinfected, and their friends can enter them in safety.

If these arguments apply to the cases of the disease among the wealthy, they can be much more forcibly urged in regard to those which occur among the laboring classes. To these everything is valuable, and that the poor man whose house has been furnished from the "sweat of his brow" should attempt to hide a case of the disease occurring in his house, is not surprising. The only advantage that he can derive from his poverty is that his infected clothing and furniture—it may be all that he has—will be hauled away for nothing; truly a privilege for which he should be thankful.

A physician seeing a mild case of variola among this class may most truthfully say, in his report to the Board of Health, that the patient need not be removed to the hospital, and that the premises do not need sanitary inspection, and the patient may be so slightly ill that he may never see him again. These people do not possess sufficient information, and have not the means to thoroughly disinfect their houses, furniture and clothing, and thus the disease is propagated from individual to individual, so that the epidemic may be indefinitely prolonged.

This board, so far as we know, has done all that it can, with the laws as they now exist in regard to vaccination. They have issued resolutions to the public, codes of regulations to their vaccine physicians, and have appointed a number of the latter in addition to those who were upon duty when the disease appeared in our midst. On paper they appear well; but, so far as active work is concerned, so far as house-to-house inspection is concerned, so far as sanitary improvements and disinfection are demanded, they have manifested a most alarming apathy. In this it must be confessed they have been supported by the public press and commercial authorities, a fact, however, which does not make their negligence the less culpable. The result has been that, in the short space of four and a half months, 2,086 persons have died from the disease, a mortality equal to about 11,000 in London—more, in proportion to our population, than occurred in that city from October, 1870, to January, 1872; and, unless something is done, and that speedily, to arrest the progress of the epidemic, it may be prolonged, as in the latter city, for more than a year. If it is, and the death rate continues as high, in proportion to our population, as it is now, the numbers destroyed will actually exceed those of the British metropolis.

That the progress of the epidemic may be arrested is beyond doubt. With a proper degree of energy on the part of our authorities, and some modifications of the laws in regard to vaccination, the disease may be banished from our midst. Three measures are all important, and these are: 1. Complete and thorough isolation of persons infected by the disease. 2. Perfect disinfection of the houses and effects of those under the direction of the Board of Health. 3. Systematic vaccination and revaccination, which should be made compulsory.

It is true that these measures would meet with much opposition from some persons in the community, but the important interests at stake demand that individual prejudices and personal privileges, be sacrificed for the general good. It is time for the thinking and educated portion of the community to unite to obtain some legislative action that will do something to protect the public from epidemics like this one.

That this is true is proved by the fact that the mortality from this disease in Philadelphia during the past three months is but little less than one-fourth what it was in London during the whole of last year.

This is the plain unvarnished truth in regard to the variola epidemic of Philadelphia in 1871—an epidemic which had nothing “alarming” in it—about which, according to the public papers and our city officials, nothing must be said or done for fear of creating a panic and driving business away from the city.

For this morbid public confidence we have truly paid a fearful price in the several thousand precious lives which have been claimed for the sacrifice, and now, to-night, there are in this city thousands of broken home circles, and from thousands of firesides there are going up to the court of the Omnipotent the mournful wail of tens of thousands who have been bereaved. And even yet the destroyer has not finished his dreadful work. About the city, at odd hours and in devious neglected streets, funerals without followers are wending their way silent and unheeded to the cities of the dead. And even now, not only in narrow courts and dark alleys, not only in the homes of the poor where the air is loaded with the poisons of filth and over-crowding, but still more along our widest thoroughfares, in the palatial mansions of the wealthy, where the air is filled with rich perfumes, and the sufferer is tended

by careful hands, the touch of which is made more tender by the untold love of aching hearts, men, and women, and children too, are tossing in the unspeakable agony of the terrible fever.

All this is going on when hundreds of thousands of dollars of the public money are being squandered by defaulting city officials, being jeopardized in unsafe National banks, while some of our legislators are under heavy bonds for the good conduct of the former, and others are managing the financial affairs of the latter. This while in our council chambers was progressing a lively discussion as to whether or not the paltry appropriation asked for by the Board of Health should be granted. For this delay you and I have been living and breathing, in an atmosphere surcharged with one of the subtlest of all poisons. For this false security, and this niggardly tribute to mammon, made at the dictation of commercial and political authorities, and which was sinful beyond human language to express, we have paid the incalculable price of some thousand human lives. Truly it is time for the community to rise in its majesty and might, and with a voice as from one man to call these to their fearful reckoning.

JOHN S. PARRY, M. D.

A SKETCH.

YOST YODER was a sadly married man;
The witches rode his dappled mare o' nights,
And left her flecked and stained with mire and foam,
Distressed, and all unfitted for the plow;
The witches dried untimely his best cows,
And his fat shoats died with a strange disease;
His two-year heifer, ready for the knife,
The witches shot to death with balls of hair—
Der Bixey Moyer found them in her paunch.

The take-off troubled long his eldest child,
And, cured of this, the lad went nearly blind,
While naught would help, until old Granny Ream
Touched with a pot-lid his weak eyes, and said
The words, and healed him; but at last he died.
On every side of him Yost Yoder saw
Witch-signs, and evil omens haunted him
At table, in the house, and in the fields,

And made his life a burden; yet he spoke
Of this, his trouble, to no living soul.
Hedged in by witchcraft and by sorcery,
The seasons' wonders were as naught to him;
Spring, with its infinite tints of tender green,
Decked the far forests, and the inter-vales,
Blown from the blooming crab-trees—sweeter scents
Than summer flowers yield—filled all the air;
And upward folding wooded height on height,
Revealing here and there a field or farm—
The Alleghanies rose more far and faint,
Fading until they mingled with the sky,
Which seemed an ocean lying vast and still,
Where cloud-ships slowly sailed unto the sun;
The joy of earth that heaven is so near
The bee felt, and the bird, and the young lamb
Leaped in earth-gladness; beauty and mirth
Of nature overflowed, yet flowed they not
For the grave race of men who tilled the soil,
Tasting its fruits with gross corporeal sense,
To whose accustomed cares Yost Yoder made
Addition of the burden that he bore—
A secret told unto no living soul.
The brethren held him as a Christian man,
And every Sunday he went forth to hear
Old Father Miller—who made it a boast
His back had never rubbed a college wall—
Preaching the Gospel in most homely words;
He ate, at lebis-mohl, the paschal lamb,
And washed the brethren's feet—and they his own—
And kissed them, joining flowing beard with beard;
And followed not the fashions of the world,
But wore his home-spun clothes of ancient shape,
And wide-rimmed hat; and in his roomy house
Were found no carpets, and no modern chairs,
But polished boards, and benches round the walls.
Here often met the brethren for prayers—
The elders leading, each one in some set
And formal phrase, said o'er and o'er again,
Till each did know by heart the other's prayer.
And Yost, when called on, spoke with trembling voice,
Inaudible, save here and there a word,
As avighkeit, and reghtheit, and amen.
He knew, for he had heard so, and believed,
That God was great—was far more powerful

Than Satan—that, as Father Snyder said,
 His people stood upon a rock secure,
 While waves of sin did break beneath their feet;
 And yet it seemed that God was far away,
 And that the devil had power in the world,
 And gave his witches power upon the saints;
 And why this should be so he could not guess;
 It worried him and darkened all his mind,
 And made his life a burden that he bore
 In silence, year by year, and labored on,
 For he had still some pressing work to do;
 But when the sprouty meadow lot was drained,
 The clearing fenced, his last gale fully paid,
 And the crop harvested, he took a rope
 And hung himself behind the smoke-house door,
 So made an end of trouble.

OF STATE AND POST-OFFICE SAVINGS BANKS.

BANKS for the savings of the thrifty poor were first started in England at the close of the last century. It is believed that Jeremy Bentham, the utilitarian philosopher, first suggested the idea in 1797, under the name of "Frugality Banks;" but like many other of his suggestions it was in advance of his times. In 1798, however, we find Mrs. Priscilla Wakefield, the authoress, had connected a "Bank for Savings" with a "Friendly Society for the Benefit of Women and Children," which she brought into operation in Tottenham High Cross, near London. The main design of her philanthropic endeavors was for granting annuities from the deposits to members after a certain age, or a weekly allowance in case of sickness, and a sum of money at a decease. In this the bank was only subsidiary. In 1804 a bank was regularly organized as a separate institution. Other banks of a like kind soon followed, one at Bath, under the instrumentality of ladies, for the care of "Savings of Female Servants."

In 1810 the first savings bank was established in Scotland, under the care of the Rev. Henry Duncan, of Ruthwell, Dumfriesshire; and it was chiefly owing to his admirable powers of organization, and the interest excited by his writings on the subject,

that such banks became favorably known and generally accepted. His "Parish Bank" served as a model for other institutions. It is not claimed that Mr. Duncan originated the idea, but he probably did more than most others to reduce their theories to practical use, and to introduce the necessary system which has since given savings banks their ample success. All these banks were under the care of trustees, who gave their names as guarantees for their honest and careful management.

The first idea of connecting savings banks with the government, was broached in 1807, by the celebrated Mr. Whitbread, who introduced a bill into Parliament for that purpose, but it failed to pass the House; his ideas were, however, incorporated into an efficient legislative measure half a century later.

Trustee banks for savings now became very numerous in Great Britain, and the government, in 1817, passed an act authorizing their establishment and proceedings; and it is a pleasure to record that the trusts voluntarily assumed by trustees were very rarely abused. After a time, however—arising probably from too great a reliance on government supervision, and from some radical defects in the law—came neglect on the part of some trustees, and abuses and frauds became more general than had characterized savings banks under the purely voluntary system; and on one or two instances of defalcations, that had been carried on during a series of years, coming to light, the people became distrustful, and fear for the safety of their savings spread like wild-fire among the poor, so that the government had again to interfere, and in 1861, they first established savings banks under their own control, through the instrumentality of post-offices. In the two instances of defalcations, however, it is gratifying to know all deficiencies were ultimately made good by the trustees, although by law they were not responsible. The funds received by both these classes of banks, the trustee and post-office banks, are now under the management of a separate department of government, and in the aggregate amount to nearly two hundred and seventy-five millions of dollars, which are invested for the reduction of the English national debt. The number of accounts open for both is 4,318,993.

The credit of their first introduction into this country is due to Massachusetts. The first bank was incorporated on 13th Decem-

ber, 1816, under the title of the "Provident Institution for Savings in the Town of Boston." Another was established at Salem, January 20, 1818; and now, in 1871, there are one hundred and sixty banks for savings in that State, showing an aggregate of deposits on 31st December, 1871, of no less a sum than \$163,545,947, from 560,890 depositors, giving an average deposit to each of \$281.72.*

A voluntary association for savings was founded in Pennsylvania in 1816, but not incorporated until the 25th February, 1819, under the title of the "Philadelphia Saving Fund Society." In New York the first bank for savings was incorporated on the 26th day of March, 1819—a month and a day after Pennsylvania—under the auspices of Thomas Eddy and J. H. Coggeshall. Other banks for other States soon followed, and now they are acknowledged institutions, we believe, in all the Eastern and Western States. Their history, rapid growth, and unexampled extent of funds, in New York, are shown in the reports of Messrs. D. C. Howell, Superintendent, and Emerson W. Keyes, Deputy Superintendent of Savings Banks, printed in 1870.

It appears that there are now 143 savings banks in that State, holding \$266,253,594 of deposits; that the number of accounts open is 713,109, showing an average of deposit of \$373.37; that the amount deposited during the year 1869–70, not including interest added by the banks, was \$133,389,700, and the amount withdrawn \$119,105,499; that the interest received or earned by the banks, for the use of this money was, \$12,918,009, and amount paid or credited to depositors was, \$10,320,207. A marvelous growth in a little over fifty years! That these banks have been so far conducted with strict integrity, and very minor losses, is warmly contended for by Mr. Howell. His computation shows that the loss is less than one-hundredth per cent.; or less than one-tenth of a mill in a dollar; and that "was not through fraud or dishonesty, but arose chiefly through an imprudent exercise of a too liberal discretion conferred by the Legislature." He also says "the attention of the Legislature has frequently been called by my predecessors, to the extremely mixed and incongruous state of the law

* These facts are taken from the report of the Governor presented to the Legislature 1st of January, 1872. The increase of depositors in the Massachusetts banks during the past year was 82,093; the increase of deposits, \$27,790,845.

as it now exists, relative to these institutions," and "the necessity of a revision is growing more and more urgent every year."

To show the magnitude of the funds and the extent of the influence involved in savings banks, Mr. Howell contrasts the resources of the national, and other banking associations in the State, with the deposits in savings banks, and shows that though the former comprise the money power of 294 institutions, which represent the wealth and business activity, not alone of the State, but of a great part of the whole country, their large volume of money is no more than two and a half times greater, than the savings gathered from the homes of the thrifty poor of the one State. "The true province of the government is to interpose its restraining and conservative power for the protection of the weak and defenseless against abuses, fraud and imposition." Every dollar deposited, together with its earnings, should be held in sacred trust, which must by no laxity in the law or in its administration, be suffered to become a loss. Inspection is needed not only to prevent fraud, but to secure a cautious investment of the funds committed to the discretion of the trustees.

With the unexampled success of savings banks, came attendant danger, not only of internal frauds, but external misapplications both of their funds, and the political influences that may be drawn from them. The latter has lately been shown in the failure of three savings banks in New York city, which were managed by the agents of Tammany. The Tammany society itself was first started as a charitable society, in 1805, but we see how widely it has diverged from its original intention!

The chief error lies in a misappreciation of their purposes as savings banks. Originally, they were intended solely for the security of small savings by those who knew not how to preserve them, and, when accumulated, how to apply them; and deposits were not investments, nor were they given in expectation of a high rate of interest. Such deposits are not like the paid-in shares of a joint stock bank, on which, as a capital, the bank trades, and by loaning makes its profits. But the small savings of the thrifty poor were put into the banks for protection only. They are not intended to be loaned out indiscriminately at high interest, but kept in government bonds, or other tangible securities, which may be quickly converted into cash to meet any hurried demand

made by depositors. Savings bank managers should run no risk whatever, for their funds ought to be at all times available. And these institutions are now more imperatively called for, as the funding loan begins a new era of a general lowering of interest on government bonds, which must be followed also by all other safe investments. Savings banks begin without capital, and they never legitimately can have any on which to trade, as all other banks must do. They only hold the savings of the poor in trust, and these should never be put beyond instant reach.

But the danger is great, as the temptations are strong, to loan their large accumulated sums to compliant borrowers, at high rates of interest. As banks for investment they have been very successful; nor would we recommend other restrictive measures than a more rigid supervision, through frequent inspection of their status (like that now imposed on national banks) on uncertain days, and fixing real responsibility on those who act as trustees. These trustees take the credit of philanthropy, and they ought also to accept the risk of responsibility.

Another danger arises from the competition of rival banks to pay an excessive interest. In Massachusetts the rates paid have frequently reached $7\frac{1}{2}$, and sometimes 8 per cent. per annum, which, every commercial man well knows, ought not to be, for it cannot be continuous, and is most probably fallacious. There is no doubt, however, that the savings banks in that State have been managed with remarkable tact and economy. They are generally connected with banks of circulation, and are managed by their agents in the same office; thus the expenses for the savings banks have been very small, the profit accruing to the managers through the use of the deposits of saving, in their own banks of loan and circulation.

This principle has been found most defective in New York. Mr. Commissioner Stone declares that the State laws provide a very lax system of supervision, and a want of a sufficient regard for the protection of depositors. He says: "This supervision can only be exercised by the trustees. *It is negligently performed in so many cases, that the evil should be met by additional legislation, declaring the duties of trustees in this particular.*" And Mr. Howell, Commissioner for the State of New York, writes: "It seems to me to be undeniable that savings banks in respect of the amount of pecu-

niary interest that is involved, and in the numbers, character and condition of those who are interested in their honest and capable administration, *outrank every other moneyed interest in the State*, in their claims to wise and considerate legislation, and in the *necessity for a rigid and thorough censorship of their affairs.*" The risks to which depositors are liable have lately been exemplified in the stoppage of three savings institutions in New York city, all of which show that the deposits have been most carelessly invested, if not dishonestly used, in all they have been put out of reach, and are not available on demand. The stoppage of these banks has caused great distress and dismay, and has shown a very culpable neglect by the trustees, if no worse can be said of them. These banks are now in the hands of receivers, and the public looks with anxiety to what the results will be. The Bowling-green Bank, of which Henry Smith, Police Commissioner, is president, shows its liabilities are over \$500,000, all invested by poor workmen. The official report made last January by the superintendent, represents its assets at \$643,911, and its liabilities at precisely the same amount.

The bank had loaned \$86,572 to life insurance companies, on bonds of private corporation, and "other securities," and \$46,416 on "personal securities." The cause for the suspension is said to have been the loss of \$250,000 in the purchase of the bonds of the Hannibal and St. Joseph Railway, which are not now worth more than twenty-five cents on the dollar. The Guardian Savings Bank had Wm. M. Tweed for president. Its condition is not known, as it also is in the hands of a receiver. The managers say that at the end of sixty days they will be able to pay all their indebtedness. The last official report shows resources in bonds and mortgages, public stocks, and cash on deposit in banks and trust companies, a credit of \$261,198, and liabilities to depositors, with accrued interest, of \$255,596. The National Savings Institution was also stopped. It is a newer institution, and has not so large a sum on deposit; but it has also been managed by the Tammany ring. Mr. Edward Schell was appointed receiver.

These risks appear to be inherent in all savings banks, east and west. In Ohio the law is not more satisfactory, as it is delusive as to the liability of trustees. The ignorant workingman, seeing

the names of some of our best citizens thus blazoned forth, naturally supposes they are securities to him for his hard-earned savings; but nothing can be more fallacious. The trustees, by Ohio law, incur no liability. It carefully forbids any of them being borrowers, or securities for borrowers, but their constant supervision over the funds is not made compulsory, nor are they liable for the acts of the manager or cashier. The trustees can be proceeded against in the courts only for a misdemeanor. Who then is responsible? Only the man who has the management of the funds. While he is true to his duties—and this is sometimes found even without constant supervision—all may go on well. Yet there is another security which may be obtained by one depositor against another. Section 10, of the Ohio law, makes the depositors of sums of \$50 and upward, "members entitled to one vote for every fifty dollars, and fraction of fifty dollars greater than one-half, deposited, but no member can have more than twenty votes." A depositor, therefore, of any amount under fifty dollars, can proceed against another having \$50 and over, for recovery of his smaller deposit.

It is certainly in the power of a "member" to bring the acts of a manager before the Secretary of State, who may appoint an inspector; but every one knows that such powers are seldom invoked, are merely delusive, and are never enforced, unless flagrant errors have been committed, and these are not likely to be known until the evil is done, and is irremediable.

The two savings banks in Cincinnati have apparently been doing a large and safe business. They have deposits amounting to \$630,000, and have been paying, or reinvesting, semi-annually to the credit of their depositors, six per cent. per annum interest. Their investments of the deposits are chiefly in real estate—the law allowing them to make such, to the extent of 75 per cent. of their funds. These banks have also been doing a general banking business, and have been exempted from State taxes, which all other banks are subjected to. We regret to learn from the Secretary of State that no reports of the savings banks of Ohio have been printed, and, therefore, but very little can be learnt of their doings.

The funding of our bonded debt has introduced a new phase in our financial position, which, although but little appreciated, because yet scarcely felt, must cause very extensive changes.

These will probably be first experienced in the value of trust funds and savings banks deposits, on which a high rate of interest is obtained. But when the interest on Government bonds shall have generally declined 16 per cent., as from 6 to 5 per cent. interest, and that there is a certainty in the future of a still larger decline, from 6 to $4\frac{1}{2}$ and 4 per cent., of from 33 to 50 per cent., the present high value of money so invested cannot be maintained. The danger to savings banks, therefore, lies in the endeavor to sustain their customary high rate of interest by purchasing some of the many bonds of hazardous enterprises now offered. For this reason, when Mr. Boutwell visited Cincinnati in September last, and spoke in vindication of his financial policy, the writer, who believed in the great value to the commercial and manufacturing community of the new funding loan, placed in his hands some suggestions for the establishment of post-office savings banks, under Government control. We thought, now that a permanent lowering in the rate of interest was inaugurated, it was due to the thrifty poor that they should have the same facility for investing their small savings, under the like undoubted security, as is afforded to the large capitalist through the bonds of the Government. Why should not the humble citizen be able to invest his \$10 or \$20 in Government securities also?

The advantages to the Government would be apparent, as shown in the large amounts which accumulate from such small sources in the sums gathered by the British Government through savings banks, but still more strikingly in the loans obtained by the French Government under Napoleon III. The British Government has now nearly the value of two hundred and seventy-five millions in dollars, invested with them, on which they pay two and one-half per cent. per annum. All this is from the small savings deposited in savings banks. The number of depositors at the end of 1870, was four million three hundred and eighteen thousand nine hundred and ninety-three. Consider what a marvelous bond of union this system weaves between the executive and the people! Yet the advantages that accrue are still more with the people, for the moral power encouraged by the principles of saving, is of vaster consequence to that of the mere accumulations of pennies.

The post-office bank appears to have supplied the small crafts

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and dealers in England most useful aid, not only as banks for their savings, but as ready and convenient resorts for temporary deposit. In Birmingham, and other manufacturing towns, the amount of deposits is very large, but they have repeatedly been drawn upon to over half the annual aggregate, and again deposits made in larger sums. In the main post-office in that town, and there are minor receiving offices also, no less a sum than \$2,500,000 is held to the credit of depositors. In towns in the agricultural districts, the withdrawals have been from one-third to one-fifth. The ready access to the post-office, which is open at all hours, and the perfect safety and reliance in the security there offered to the smallest sums, are great incentives to prompt investment. Any sum from 25 cents to \$750 is received, the postmaster giving a receipt in a pass-book gratuitously to the depositor. From two to five days are required to be given the postmaster in case of a withdrawal, for all demands have to be forwarded to the head office in London, and all payments are made direct from thence, through a check for the amount, which is payable at any post-office in the United Kingdom.

The business of both the old trustee banks and those of the post-offices, is conducted in London by one controller and fifty clerks in the general post-office building. On the 16th of September, 1861, the first post-office banks were opened in Great Britain, and on the 31st of December, 1862, there had been established 2,535 post-office banks; the number of depositors was 639,216, and the amount received in dollars was \$7,573,400. At the end of 1870, there were 4,082 receiving post-offices, 2,135,993 depositors, and the amount received \$77,320,000—an increase of 1,100 per cent. in nine years. The number of withdrawals for that year were 2,130,000, amounting to \$23,800,000.

In 1861, the old trustee banks had also an invested capital with Government of \$207,800,000, and at the end of 1870 they have but \$189,600,000; showing that the post-office banks are gradually superseding them. In 1865, the old banks numbered 561; in 1867, they had declined to 539. This is partly because many of the trustees are desirous of retiring from the responsibility, as the post-office banks are now so numerous, and so convenient, there is no longer any need for the continuation of their old banks. On the whole sum deposited the Government pays $2\frac{1}{2}$ per cent. per

annum. If the interest is not drawn out, it is reinvested half yearly for the benefit of the depositor.

The Government of the North German Confederation, are about to introduce the post-office savings bank system in January, 1872. It is based on that which has proved so useful in Great Britain. They propose to allow an interest on deposits of $3\frac{1}{2}$ per cent.

The Postmaster General, Mr. Creswell, has in his annual message proposed the introduction of savings banks through his department. We believe they can easily and conveniently be applied, as the same organization exists with us as in England and Germany; and our Funding Loan establishes a permanent rate of interest, which is not likely to be affected for many years to come.

Suppose, for the present, the deposits received are invested in our $4\frac{1}{2}$ per cent. bonds, and depositors are credited with one cent per hundred dollars per day, or three dollars sixty-five cents per cent. per annum, currency. The difference would be eighty-five cents (gold) per cent. for expenses, at which rate, on the sums now held, through the post-office banks alone, in Great Britain, it would amount to \$657,200 per year in gold. In case depositors desired to make a permanent investment of \$50 or over into Government bonds, the department could easily do so when required. That the deposits would, in a short time, greatly exceed this amount, is evident from the much larger deposits in savings banks in this country than in England; for, they are already nearly four times in amount, or as one thousand million of dollars, in the States, to two hundred and seventy-five millions, in Great Britain.

In fine, the question is a very important and pressing one, and it may lead to others no less influential to our social progress; and among these, while we advocate the necessity for the security which the Government alone can give, we would impress upon our prominent thinkers—*how the savings of the poor may be employed for the benefit of the poor*. This question should, however, be worked out by the people for themselves, without the interference of State or General Government.

JOHN H. OSBORNE.

THE
PENN MONTHLY.

MARCH, 1872.

WORK AND PLAY.

THE present generation may congratulate itself upon the recognition of recreation as the complement of labor. The constantly growing attention which is given to the care of over-worked and wearied man is a proof of our advancing civilization. The increasing notice drawn to the physical and moral condition of the laboring classes, the agitation of the eight-hour labor system, of the opening of public parks and libraries on the first day of the week, and the general tendency toward the enfranchisement of man's God-given Sabbath from its ghastly ceremonies, whether premature or not, whether misdirected or not, show the first stirring of a higher appreciation of mankind and a better understanding of God's ways with men. These are but scattered germinations of the ideas which have been widely sown, though for the most part in ground not yet ready to receive them, liberal ideas inclining to the belief that the maximum of effective work can only be obtained from man when the trinity of which he is composed, viz., soul, mind and body, are in equilibrium. When thus expressed, it seems so clearly a truism as to excite surprise, that men, for so many generations, have acted in a manner totally forgetful of it. And yet, though to say that a thing is true in theory but not in practice, carries its refutation in its absurdity, nevertheless we will find few to dispute the above proposition, and as few who will attempt to put the principle it

involves into practice. It took many decades to convince our farmers, and indeed they are not yet all convinced, that the sum of remunerative labor from a horse put to work at three years of age, is much less than that from one thus used at five years. But it grieved them to see these animals frolicking about the fields in idleness, as if anything could be less like idleness than the making of bone, muscle and health. The difficulty was that they could not wait; and this, indeed, is the great trouble with us Americans in all things, viz., that *we* cannot wait.

Love in its various gradations and, alas! that we should say it, also degradations, is the great motor of human action. All love is attainable, either the desire for physical gratification which is pleasure, or the longing for spiritual gratification, which is happiness. With reference to time there is present pleasure and future pleasure, as well as present happiness and future happiness. We thus see that there are four great classes into which the motives to human action are divisible—the first two physical and lower, viz.: the desires for present and for future pleasure—the last two spiritual and higher, viz.: the desires for present and for future happiness. Of these the lowest class is the one composed of the desires for present pleasure—the highest the one composed of the desires for future happiness. This brings us to our main definitions, viz.: of Work and Play.

Effort in the pursuit of present gratification is Play. Effort in the pursuit of future gratification is Work. In play the effort and its reward coexist. In work the effort is entirely antecedent to its reward. In other words: in play the motive is in the present; in work the motive is in the future. The only drawback to the complete enjoyment of play is the foreshadowed work in the future. The only alleviation to the utter tediousness of work is the foreshining joy from the future. In considering the nature and effects of work and play, we will treat them under the heads of physical, mental and spiritual, and after involving them under these conditions with different factors of quality and quantity, attentively examine the results. The labor question will also be briefly noticed, and in conclusion we will essay to give an approximation to the proportion which play should bear to work, in our own day and generation.

We will begin with play, which, remembering our definition, is

"effort in the pursuit of present gratification." Physical gratification is pleasure, therefore in purely physical play physical effort and its end, physical gratification, coexist. Of this, the best example is the play of the lamb, the kid and the colt in the pasture.

The play impulse is here implanted for a purely practical purpose, viz.: the building up of the animal structure. The growing bones and muscles are hungering for food, which exercise, by quickening the circulation, conveys to them in increased quantities; exciting through the whole creature at the same time a sensation of delight. This play, which is entirely physical, is often met with in man. Who of us has not seen the boy, brimming with health, while sauntering through the fields or by the roadside suddenly leap over fence or brook, or break into a tearing run without the slightest apparent motive for it? Nay, some of us have seen men influenced by the same feelings, and fortunately not ashamed to yield to them. When we observe an animal, either with or without reason, indulging thus, we may be sure that physically, at least, its condition is excellent. Indeed, the amount of pleasure derived from exercise may be taken as the gauge of health.

Mental gratification is amusement. Instances of this mental play are light reading, theater and concert going—in cases where the lighter kinds of music and drama are given, etc. All objects that are attractive, all sounds that are pleasing are factors of mental play. Pure amusement touches neither the feelings nor the senses and reaches no further than the mind. Through memory the field of amusement stretches back into the past, through imagination it reaches into the future.

Spiritual gratification is happiness. A few instances of this spiritual play are the enjoyment of spiritual, political and social power, of music, of the legitimate drama. Also the affectionate intercourse of families and friends. Among Christians it is also found in communion with God through prayer and thought, in the ceremonies and sacraments of His church, and in the society of His children. Here the soul also uses memory and imagination. This is especially true of the latter, for the godly find their chief joy in the anticipation of their eternal rest. Memory and imagination are mental attributes, but by means of these alone can the soul grasp the past and the future, for through the mind is its only communication with the physical universe.

This must always be remembered lest we become confused in our judgments. Wherever feeling, *i. e.*, sentiment, is involved, we are investigating beyond both physical and mental, and in the spiritual man. Let us now unite the element of excess with the three phases of play we have been considering, viz. : Pleasure, amusement and happiness, and bearing in mind our definition of play, let us observe the results.

Pleasure, when carried to an extreme, induces excess in some functions, and deficiency in others; and this, as physicians have at last determined, is disease. The punishments which excess in pleasure bring upon its votary are innumerable, working and distorting him both physically and mentally. Even the play-impulse itself, using the term physically, if we could imagine it continued indefinitely, would lead to disorganization and death. Excess in amusement or mental play produces mental disease which is insanity. In other words, it destroys the mental equilibrium just as excess in pleasure destroys the physical equilibrium, which is health. We use the word "insanity" in its medical rather than in its legal sense. It is probable that the excessive determination of blood to a certain portion of the brain, and a corresponding enlargement, are the results of too severe mental application, of too continuous attention to a particular subject. This produces weakness, which is manifested in morbid irritability. If treated in time, and properly, the blood may be turned away, and the enlargement reduced, and the patient restored. If, however, the abnormal condition become permanent, incurable insanity is the result. Judged by this just, though apparently severe standard, how few of us are physically and mentally sound? We can all of us call to mind those who are either music-mad, picture-mad, drama-mad, missionary-mad and the like. But, alas! who shall be able to name the number of the novel-mad and the fashion-mad? Frankly we must confess that we all have our hobbies, and persist in riding them, usually with more or less discomfort, seldom sitting them gracefully, often finding it difficult to sit them at all, and each becoming more and more enamoured of his Pegasus as it grows more restive under his control.

It seems scarcely possible for us to conceive of happiness existing in excess, but when we remember that we are considering it solely with reference to the duties and pursuits of this life, we

will see that it is not only possible, but that it is frequent. Indeed it too often occurs that men are satisfied with present happiness, and, either forgetful or doubtful of the future, devote their lives to its acquisition. The prizes of the modern pagan are happiness and pleasure in this life. Whatever there may be to him of bodily or mental discipline, is only that their attainment may be made the more certain.

The followers of the humble Nazarene discard both when they stand in the way of worthiness, upon which their steady gaze is fixed. The legitimate reaction of the excess of this selfish happiness is despair. To find this we have only to observe its disciples when the sources of their happiness become dry, when power and authority fail, or when that which seems the blackness of an eternal despair is projected upon their last hours.

We have thus noticed play in its phases of pleasure, amusement and happiness, and have observed the results when each is carried to excess. It is rare that either of these kinds of play occurs alone. Amusement and pleasure are generally combined in man. Indeed the highest and most recreative play is that in which soul, mind and body all participate.

Let us now examine work in the same manner in which we have considered play, remembering that work is "effort in the pursuit of future gratification."

The consequence of physical work is fatigue. Instances of this are, doubtless, common in the experience of all. Each of us has at some time thus worked, either in the field or the garden, the factory or the shop, or in some physical contest or exercise. In the latter it is perhaps somewhat difficult to distinguish between work and play, inasmuch as in most of them these two are combined. Usually they are play at first but become work before they are finished, the main object being to prove our superiority rather than to derive pleasure from exercise. They are only play so long as the latter is the chief motive. The proper rest to such fatigue is moderate exertion. This is no paradox, for perfect rest is not inaction, but recreation. The best restorative for the muscles fatigued by work is not quiet, but moderate exercise. The man, after a physical contest, the horse, after a race, is best rested, and soonest recovers his wind by walking and not by remaining still. If, however, a desire for quiet and for sleep immediately

follows the exertion, it is conclusive evidence that it has been excessive, or of the existence of disease. The healthy laborer, after his tasks are finished, rests either by walking, riding, in sport with his children, or in merry family intercourse. A hearty laugh is most restful. Let it be remembered that we are not considering the case where the labor has been excessive; we will treat of that presently. If, however, the laborer be unhealthy both in body and mind, for they are closely connected, his rest will, for the most part, be abnormal. He will substitute the transient stimulus of the wine cup or gaming table. If the man's rest be of the former kind his sleep will be continuous and perfect. If of the latter, fitful and imperfect. Sleep is an excellent test for health. If it be sound, the physical condition may be presumed fine, if it be interrupted or impaired, something is physically wrong.

The consequence of mental work is weariness. After a certain amount of application, the attention flags, and it becomes difficult to bring back the mind to the matter in hand. When this occurs it requires rest, which is best afforded in amusement, and not in the endeavor to abstain from thought. The student, upon feeling this weariness, should not immediately throw himself down and seek sleep, but should amuse his mind for a few minutes by some light reading, or conversation upon subjects dissimilar from that with which he has been engaged. This done, his slumber will scarcely be feverish and disturbed. The usual result of spiritual work, if it be exhibited otherwise than in fatigue or weariness, is dejection. The first object of soul-work should be the saving of our own souls; the next, the saving those of our neighbors. The latter is often much helped by caring for their bodies, and indeed in many cases should be thus initiated. Christians thus engaged often meet with a great disparity between their efforts and their successes, and, notwithstanding the consolations of faith, give way to sadness and discouragement. The best rest here, is to cease for a while from their labors, to consider their blessings, God's promises and power, and to look forward to His rewards which are to be given, not so much to success humanly understood, as to earnest effort in the right direction.

Let us now involve the element of excess with the three phases of work we have just examined.

Excess in physical work results in disease, just as did excess in physical play. We shall consider this under the heads of out-door and in-door work. Excess in the former does not seem to impair longevity *i. e.*, to injure the body, as seriously as in the latter. The former chiefly affects the muscles, joints, and sometimes the nervous system; while overwork in-doors first shows its evil effects in the vital organs, the brain, heart, stomach and lungs. The last are most frequently attacked. The first indication of excessive out-door work is the enlargement and stiffening of the different joints, and especially those of the hand. These may increase until their action is interfered with, and the climate seizing upon this, fixes rheumatisms firmly upon the system. Neuralgias, various affections of the spine, resulting generally from the stooping position which the husbandman often for hours maintains, and paralysis, are also often induced. It is a rare thing to meet with a farmer or laborer somewhat advanced in years who has perfect joints or who has not been troubled with some of the above named affections. As a rule they work too hard, and the results are divers deformities and disturbances which impair their usefulness, and are sometimes propagated in their offspring, thus often deteriorating the type of man instead of improving and perfecting it.

We now come to the most formidable enemy of the human race, the origin of the far greater part of its vice and its disease: excessive in-door labor. We are most of us familiar with the colorless skin and emaciated form of the factory-hand, that class being in the worst condition of all as regards the chief factors of health—light, air and equable temperature. These unfortunates seem to focalize in themselves all the ills of the flesh. Their bodies and minds weakened by disease, their souls scarcely stirring within them, and then only to cast upon their lives a somber melancholy and dejection. But how can it be otherwise with those who work from eleven to fourteen hours a day in impure air and a heated atmosphere, with too little food in their stomachs and too much anxiety in their minds? Only miraculous power from these factors could produce health, thrift and happiness. Think of children born of such parents. What chances have they, even under the advantages of pure air and moderate labor, and what when, as is mostly the case, they are put to the same

drudgery under the same pestilential influences. We have confined ourselves thus far to excess in in-door physical labor and have taken the worst instance in which all others are included. In many cases undoubtedly the air may be pure and the temperature moderate, but the work usually required is, from its nature, too much and the time too long. The workman will be utterly fatigued, his sleep unrefreshing, and his health will fail. All these causes uniting will make it impossible for him to bring a perfect body and cheerful disposition to his task, and these are the only conditions under which he will meet with success.

If the mind after refusing to work be continually forced to it, the result is insanity. This will be readily admitted, and instances are within the recollection of all. But we further insist that if the mind be persistently and exclusively confined to the consideration of a particular subject, or class of subjects, their relative importance is lost, they grow out of all proper proportions, and the judgments of the mind itself become erroneous, which is to all effects and purposes insanity. To this class belong fanatics of all creeds and isms. The difference between this and confirmed insanity is only one of degree.

We have now arrived at the last step of our analysis, viz.: the consideration of excessive spiritual work. The soul steeped in avarice of social, political or spiritual power, whose every feeling is enlisted in the prosecution of ambitious enterprises, even though it does not meet with failure and disappointment on the way, is appalled by the utter insufficiency of such rewards when obtained, and sinks back into hopelessness and asceticism. If the Christian philanthropist, notwithstanding the dejection which results from efforts that seem to meet with but little success, persists in his spiritual labors without refreshing himself with spiritual rest, the consequence is despair. A melancholy instance in which these feelings so preyed upon body and mind that death ensued, has come within our own notice during the past year.

Thus work and play, having the same origin, viz.: love of gratification, when carried to excess result in the same discords, viz.: disease, insanity and despair. In man the physical, mental and spiritual so overlie and intermingle, that seldom is any motive or its results wholly in either nature. It is only by arbitrarily separating these, that we can consider each distinctly.

Human nature is surrounded by immutable laws, which become impregnable defenses against disease and misery, to him who observes their limits.

The problem which at the present day most earnestly urges a solution is: What proportion should play bear to work? or, what is the greatest amount of labor that the average man can perform most advantageously to himself and to his employer—for the interest is one—in a day? Obviously this will much depend upon the nature of the labor, some kinds being more exhausting than others. That kind which, in excess, most deteriorates mankind is purely mechanical. Mental labor comes next in its evil results, and spiritual labor last. Labor which employs body, mind and soul is least injurious; hence spiritual labor comes last in the above category.

The three natures, when working together, seem to supplement each other, as in a less degree do two of them. Morbid conditions of air and temperature are better resisted by work of this kind. This is the reason why physicians and nurses are comparatively so secure from the contagious diseases among which they work. Mechanical labor dwarfs both body and mind.

The type of this is factory work. The hands are so many machines, mere machines, working after a pattern and forever doing the same things. Indeed, their labors, more than any other, are from time to time superseded by machines. Perhaps it is in this way that this question will be solved at last. Thus in persecutions like that of Jacquard, we have additional instances of the madness which at times drives men to attempt the destruction of their greatest benefactors. Undoubtedly the crowding, and consequent ill-ventilation and high temperature, as well as the injurious substances with which the machinery fills the air, are efficient factors, but the chief cause is the wholly mechanical nature of the work. Without doubt, twelve or fourteen hours of this work every day are too much. Let us here briefly refer to the annual report of the Massachusetts Bureau of Labor Statistics, a carefully written and clear exposition of this system as it now exists in that State. Children are worked in the factories; they sometimes walk many miles a day while tending their machines. Laws, wherever they oppose this, are easily evaded by the parents. The condition of the hands seems continually changing for the worse. We

are told that the average pay of some sixteen thousand work-people is eighty cents a day. After from eleven to fourteen hours' labor, they are compelled to attend to their various home duties. Their dwellings are often damp, dark, comfortless and unclean. How could they be otherwise? They do not build them, and after the long monotonous day's work there is not enough life left for the proper household labors.

They seek an ephemeral refreshment by consuming quantities of wretched coffee and tea, and, alas! of drinks stronger than these. These sad details were once new, but they are scarcely so now. But what is the moral condition of a factory town? Here we are brought face to face with the significant fact that a diseased body is predisposed to vice, and especially is this true where a vital organ is affected. How much more is this the case when the mind is uneducated, and the legitimate wages insufficient. We believe that eight hours' labor of an intelligent, healthy factory man or woman would bring the employer more profit than fourteen hours of the present incumbent. But where can we find a sufficient number of such to make a fair test, and who would have the hardihood, not to say the humanity, to attempt it. Such labor, inasmuch as the condition of the workers would thus become greatly ameliorated, would be more cheerful.

Education is a great promoter of national prosperity, not only by giving intelligent labor, but also by indicating where the supply is not equal to the demand, and by suggesting means for carrying out the changes thus made desirable.

One of the chief evils of the factory system is the putting children to work where they must work under the greatest physical and moral disadvantages. The causes of this are, firstly, the low wages of adults, which makes even the smallest contribution to the family store most important; and, secondly, the want of proper education in the parents, and their consequent ignorance of its moral and physical value. We have learned to economize the flesh and blood of the brute creation, have discovered that by using them with reference to the laws of their nature, and harmoniously with them, the result is not only creditable, but profitable to humanity.

It is now admitted that when animals are put to labor before their development is complete, during the processes of growth,

and the formation of bone and muscle, that the functions are disturbed, and that labor instead of exercise results, not in comeliness and health, but in deformity and disease.

The average amount of work also, from a life thus used, is much less than from one that is allowed first to mature. All this is equally true of human flesh and blood, which includes brain. In the immature organization, whether of animal or plant, growth is the substitute for labor. The faster the growth the more should the muscles be exercised in play, but not in work, for in the former they cease their exertions at the coming of fatigue, while in the latter they must continue them, and it is just here that the harm commences. The appropriate play of animals is running, leaping and the like. In man, it is games, which exercise both the physical and mental. Hard study is also injurious to the young, whence the advantages of the Kindergarten and of object lessons. By these means the body and mind grow harmoniously, mutually assisting, and their food is supplied without begetting weariness or dislike. That which is exercise to the plant is the swaying of its branches and the fluttering of its leaves in the wind, as well as the alternating influences of sunshine and shade. These do not earnestly commence their productive labor, which is fruit-bearing, until their organizations are complete. It is nearly impossible to estimate the great injury which body and mind sustain when the young have too little play, too little food, and too much work.

Most of the mining interests are in a similar condition, and with certain obvious modifications, what we have said and shall say, is equally true of them. Of the evils which prevail in this direction, the recent disturbances and their far-reaching effects are painful illustrations.

We may now legitimately conclude that the most remunerative work is that which is cheerful and intelligent. Work can only be cheerfully and intelligently done when body and mind are in a normal and healthy state. This state cannot exist except the laws which condition it be strictly observed, and this observance perpetuated. Let us now examine the obstacles which seem to prevent the consummation of the conditions for the most remunerative work.

The operatives say that their pay is too small to support them.

The employers say they cannot afford to give them more. The first, the assertion of the working people, is for the most part true, and the proofs of this are so numerous that the investigator can scarcely escape conviction. Most assertions to the contrary, if traced to their sources, will be found to be *ex parte* statements. As for the second, we believe there are those whose short-sighted policy it is to extort gain from all circumstances, careless of the condition of their work people. These, however, are few, and probably most employers make the above answer sincerely, and are in a great measure sustained in it by facts. Still, they seem to lay themselves open to blame in certain things. They are mostly accustomed to extravagant living, hence, when they answer they cannot afford to pay higher wages, we are to understand that they cannot, not that they will not, deprive themselves of certain luxuries of life in order to supply more of its necessities to their laborers. Many of them, undoubtedly, believe this, although they do not put it in precisely this manner. The per centum of profit with which this class were formerly content, by no means satisfies them in these days of fabulous metal-mining and railway dividends. They do not consider the immense sums of money that have been lost in these enterprises. Men will exhibit the greatest eagerness in trumpeting their gains, for this advances their business interests, and brings them credit and influence among their fellows, but they are prone to evince equal solicitude in concealing their losses for opposite reasons. It is more than probable that the amount of labor money that has thus been thrown away, far exceeds that which has been won—we say won, advisedly. But in the manufacturing interests, the case is precisely the reverse of this. The vast profits do not, however, here stand out in such strong relief, by reason of the far greater population among which they have been distributed, and the much more temperate manner in which they have accrued.

But when the ground of their answer is well taken, why is it that they cannot afford to pay wages which shall bear a better proportion to the wants of the working classes? The chief reason is that the law of supply and demand has been infringed and misunderstood, greatly to the detriment of the working people, and measurably so to that of their employers. During our late war, in consequence of the large increase in the con-

sumption of certain commodities, most industries received a strong impetus. Naturally, the number of workmen engaged in these enterprises swiftly grew. Thus in these localities the population accumulated and accompanying trades were fostered. The owners rapidly amassed wealth, which in some instances was used in erecting mills or otherwise extending their business, as though wars were never to cease. But the war did cease, and what was the result? Some, especially of those who reinvested their gains in their business, failed and were closed up. The workmen remained without occupation, and many of them without means. It would have been better for them, perhaps, had they all been in like condition. These, being unable to transport themselves to other places, were forced to turn their hands to whatever they could, usually to field labor, and in the sequel bettered their circumstances. On the contrary, most of those who had saved enough to enable them to change their abodes, did not, as some of the better informed of their fellows did, and as they should have done, journey westward, but set out for other factory towns of the east. And what was the condition in which they found things on their arrival?

Precisely what persons educated and intelligent would have foreseen. The same causes were operating in a similar manner. The manufacturers were not in need of more hands, but were discharging old ones. Thus the supply was in excess of the demand, and these as well as the new comers were willing to work for next to nothing rather than learn any other industry. In addition to this, the employers, by reason of the decrease in their business, were anxious and felt poverty before it reached them, and as a result of these things wages were considerably reduced. Thus the sad state of things, which was beginning to attract much attention before the war, was reproduced, but in an aggravated condition.

There seems to be a great disinclination on the part of factory work-people and the like, to change their courses of life and to engage in a different occupation. Their labor unfits them for every other employment, and they often affect to consider themselves above the field laborer, whose condition, nevertheless, is so eminently superior to their own. The growth of a factory or mining town is usually as follows: From the first the population rapidly increases, the children following the pursuits of their

parents. At first the pay supports them comfortably, but by and by the earnings of the children are also needed; their education is neglected and here the evils begin. After a time, the amount of labor continually accumulating, the supply exceeds the demand, and certain employers, naturally enough, under the circumstances, commence to pay smaller wages, a course which is ultimately pursued by all. Competition also grows and the profits in a measure diminish. The changes continue, the wages gradually decreasing as the cost of the necessities of life increase with the growing population. This goes on until the pay is reduced to the very lowest sum upon which life can be supported. Meanwhile protective associations are formed for the purpose of organizing opposition to these inevitable results, and the apparent diversity of interests between employers and employed arises. But a more general and better education among both would have averted these misfortunes. If the latter could have discerned the indications of the excessive supply of this species of labor, they would have taken measures to change both their abodes and occupations; thus alone could these calamities have been avoided. In their efforts the employers should have directed and assisted.

The ultimate object of trades unions, although not the one they profess, is impossible of attainment.

No organizations and associations, no deliberations and resolutions can force an increase in consumption upon the public, though occasionally they may be of service in stimulating certain reforms and in systematizing resistance to the tyranny which ignorant capital sometimes essays. When the number of workmen far exceeds the amount of work required, an increase of consumption must come or the number of the former must be diminished; and this latter is the only possible solution of the problem. There is no glut of labor in our country, nor is there likely to be. For centuries to come the aggregate supply will fall far short of the demand. If these associations, instead of organizing strife, would unite their energies in the attempt to facilitate interchanges of labor, and to transport its surplus to conditions and localities where it is in demand, order would be evolved from this chaos of seemingly conflicting interests, and a great work inaugurated. Emigration and immigration societies and their agencies should not be confined to the seaboard, but could find a fertile

field of labor in many of our manufacturing and mining districts. Education, which makes it easier for a man who finds his occupation unremunerative to select and turn to another, will also remove the strange antipathy to such a change, which is so prominent. To the ignorant the unknown is ever terrible. The West to many means Indians, scalping-knives and grizzly bears. Thus, by the acquisition of correct knowledge, the fear which arises at the mere mention of leaving home might be done away with.

Another evil effect of a surplus of population is the greater number of beneficiary institutions requiring support. These tend to increase the taxes, which, in their turn, help to swell the living expenses of those who support themselves by their own labor. Private charity also become more imperative. The tradesmen and merchants of these towns can both see poverty and suffering and feel for them when presented in their more patent manifestations.

For the most part, however, their sensibilities are not delicate enough to recognize these in the wan features of their customers and in the anxious voices which inquire the prices of their wares, nor does it occur to them that the most efficient charity would be a reduction here.

As the evils we are considering mostly result from the crowding labor into certain localities, the measures for its dispersion and application should attract the attention of all philanthropists, tradesmen and patriots; since by these means will the resources of their country be best developed, and its interests, together with their own, be best advanced.

The first results of reforms undertaken in the directions we have indicated, would be a diminished number of working children, a general improvement in health and spirits, and a greater sympathy between masters and men. This will especially be the case when some system shall be adopted which will give the working people a direct interest in the profits of their labor; and the time when this will be the case is approaching. The hours will also be shortened; eight a day should be the maximum for factory work, which, from its monotony and confining nature, is most fatiguing. We are aware that many will groan and scoff at this, but perhaps they have thought of it before, nevertheless.

The populations of these towns will begin to diminish to their

proper numbers, and the cry will perhaps be raised that property is depreciating. But if fault-finders be told that in the same localities human flesh and blood are appreciating, possibly they will believe it and cease their clamors; but we must confess it doubtful. A healthy competition among tradesmen, or coöperation again, will begin to reduce the prices of the necessities of life to appropriate figures. Trades unions will then be transformed into literary and reform societies.

The evils which from time to time affect all kinds of labor are for the most part the results of causes to which we have referred, and their remedies can be deduced from what we have already said. The difficulties which railroad corporations and the like sometimes have with their laborers, come often from the abuse of their privileges and the misappropriation of profits. Strict, just and adequate legislation is the only certain remedy for these.

The troubles which are connected with agricultural and domestic labor arise mostly from want of it, rather than from its excess. To get ourselves rid of these, we must first eradicate the idea of degradation which is connected with them in ignorant and vulgar minds. How absurd is the touchiness which some exhibit when the word servant or laborer is named. It seems by many to be considered synonymous with slave. We should none of us submit to slavery, but it is our bounden duty to be servants. Any man or woman who honestly earns a living, no matter in what position, should be honored. Men should beware how they attach a demeaning sense to these words. Such ideas are but outgrowths of the shoddyisms and emasculation of our fashionable society. How the condition of the out-door laborer or the domestic servant can be thought inferior to that of the factory hand or collier, has always seemed very strange to us. With the exception of a single limited direction, the former appear to possess greater intelligence, as they certainly do more common sense.

This is especially evident if we confine ourselves to those born in this country; as regards their comparative physical conditions, there can surely be no room for doubt. Want of space alone prevents us from saying much more in this connection.

With reference to pay, the advantages seem still to be with the former; for women earn from ten to twenty dollars a month in addition to their board, and men from twenty-five to forty. Both

men and women have far more leisure time, while their work is of a lighter and pleasanter nature. The feeling of superiority which certain classes of the workmen in towns seem to entertain toward the laborer on the farm or garden, may be partially explained by the fact that, generally, the denizens of cities are inclined to arrogate to themselves many intellectual advantages when their country neighbors are under consideration. Nevertheless, in substantial things we cannot discover anything to sustain them in their positions. The children, too, of people who live and labor in the country, are seldom permitted to neglect school, while in cities it is common enough to see those who have barely learned to read and write, indeed it is sometimes possible to find them totally unfamiliar with their letters at ten or twelve years of age. The only foundation for this feeling of superiority is a certain increased quickness of mental action, or sharpness, which seems to characterize the inhabitants of densely populated localities. This however, is extremely limited in its scope and superficial in its nature.

With regard to domestic labor there seems to be something offensive in the idea of services about the person, which subject them to the continual supervision of their employers. This superintendence is not always reasonable or pleasant, but it is often supercilious and dictatorial. We think it will be candidly confessed that this is more often the case with women than with men.

This results from the greater irritability of the female system, from their more monotonous lives, and from a want of familiarity and association with organized labor. For the most part the relation of master or mistress and servant is not so cordial and friendly as it should be. If it be objected that it is difficult for sympathy to exist under certain conditions of ignorance and vulgarity, it might be answered that amid the intricate interlacing of the duties of our social system, there may be one discovered in this direction, and in striving to teach and elevate, by precept and especially by example, a reward and satisfaction may be ultimately found. Some plan, also, should be adopted by which faithful performance of duty may be remunerated with some proof of consideration over and above the wages, and servants should be treated as much like the family as is consistent with their occupation and behavior. Certain fixed daily tasks

should be appointed them, and when these shall have been properly completed, no matter whether earlier or later, the rest of the day should be their own.

These tasks should never be such as to necessarily occupy them into the night, nor should they be worried by an inconsistent diversity and continuousness of orders. Notwithstanding its manifest absurdity, we have noticed this latter evil in many city establishments. It is not only productive of discord in the service, but it causes discomfort throughout the household. All reproof should be calmly and considerably administered, all direction impassionately but irrevocably given. A little care and patience will invariably result in friendly relations and harmonious efficiency, if the master and mistress will exhibit a real interest in the welfare of the servant.

The last kind of work we shall mention includes the clerks, male and female, of merchants, tradesmen and the like. In these occupations the supply is usually greater than the demand. This is caused partly by the natural increase of population, but mostly by the luminous ideas of city money-making facilities, which seem to pervade some rural districts. The small amount of previous knowledge and training usually required, and the conventional respectability of these pursuits, tend also to swell the number of applicants. The evils of this class are of comparatively small importance and are rapidly correcting themselves. A more just regard for the comfort of its members is making its way through all branches of trade.

We may now appropriately consider the hours best adapted to efficient labor.

In factories and collieries, as already stated, we think eight hours quite enough. This would also give about the same time for the necessary household and social duties, meals and recreation, and again eight hours for sleep.

The work should begin at eight and cease at twelve. Two hours should be given at noon instead of one. This alone in the course of a few months would give a marked improvement in the condition of the workmen. The mid-day meal is now too much hurried, and labor encroaches upon it, both before and after. This rest of two hours instead of one would also bring them to the end of the day fresher and in better heart. In some locali-

ties and under certain circumstances it might be better to make the hours from seven to twelve and from two to five. We venture to assert that after a time the work derived from this system, subversive system, as some will say, will exceed, both in quantity and quality, that which is now yielded from eleven and twelve hours.

With reference to field labor, inasmuch as most of it must be accomplished in the warm months, and since it is less monotonous and wearing by reason of its using the mind more, and the continual supply of pure air which accompanies it, ten hours for the most part will be enough. Still we should carefully preserve the two hours at noon, which will tend to keep man and beast readier for their tasks. The hours should be from seven to twelve and from two to seven. Indeed we have known a case where they were from six to eleven and from three to eight, thus avoiding the heat of the day. It was said too that because the men worked during the cooler hours, and came from their nooning completely rested and refreshed, the labor performed was considerably more than under the old method of twelve hours and but one at midday.

With the clerks of merchants and the like the hours will necessarily vary, and it is impossible to make any rule that will be generally applicable. The only principle to guide is that the severer the work the earlier should it cease. There are but a very few trades in which the services of the clerks are needed at night. It will be found that the quality of the work will be much improved if the employers do not permit their labors to become so prolonged as to fatigue and weary them. The quantity of trade also will be increased, for customers are attracted by courtesy and an evident desire to please. But to be thus affable when overworked is beyond human nature.

Let us now consider the various kinds of play that are best adapted to these different kinds of work, and that will best rest and restore the workmen after their labors.

Among the working-people of factories and mines a love of flowers and fresh air, of fields and of streams, is particularly prominent. These predilections may indicate to us the direction in which to look for the kinds of play appropriate to them. Tree gardens and parks should be established, in which all of these things could be enjoyed, and music should be supplied of a char-

acter suited to the audience. They should also be arranged for social entertainments and intercourse. For these there are many in Europe, and especially in Germany, that will partially serve as patterns. Their dwellings also should be supplied with gardens, no matter how small. They would be quite willing to set out earlier, and to walk farther, if they could have such homes to return to. It must be remembered that we are stating simply what ought to be, but not, unfortunately, what is likely to be soon. Libraries and reading rooms should also be instituted, and the collection of books and periodicals carefully supervised. In some towns the latter have been started, but either soon died out or maintained but a sickly and inefficient existence. Indeed it could not be expected that men and women after eleven, twelve, and thirteen hours' work, would have enough spirit left for anything but the most necessary household duties. Those who have no such duties to occupy them either attempt to increase their scanty means in immoral ways, or to forget the present in the temporary exhilaration of drink. For until the needs of the body are satisfied, and a certain amount of physical comfort supplied, it is useless to think of cultivating the mind and soul.

All of the above means of recreation should also be within the reach of clerks and domestic servants. The latter, however, will generally use the libraries to supply themselves with reading matter, for using which they have many opportunities. The gardens they will enjoy less frequently, because, though their labor is less arduous, they are more continually confined to the premises of their employers. It seems to us a barbarous custom to refuse to domestic servants the privilege of receiving the visits of their male and female friends. Although the permission may be sometimes abused, a little discretion and tact on the part of master or mistress would obviate most of the difficulties connected with it.

The garden, and especially the music, would be most pleasant play for the agricultural laborers could they be made accessible to them.

For the most part such should resort to social and domestic intercourse. They are often, however, great readers, and would make good use of libraries within their reach. These should be supplied, for our country villages are often entirely destitute of such advantages.

*

It is scarcely possible to point out in any other than a general manner the particular kind of play which will be the best reagent and restorative for each class of worker. But if the laws of labor be shortened, as the circumstances of the workmen improve, they will give unmistakable indications toward that which is most appropriate, and an employer or legislator whose heart is in the work will be at no loss what course to pursue.

It has always appeared to us that in agriculture is to be found the greatest and best, as well as the most improved, field for intelligent labor. Its circumstances combine in the most harmonious proportions, and under the most agreeable conditions, physical, mental and spiritual work.

The greatest poets, statesmen and divines of every age have, in their writings, borne the strongest testimony to its fascinations; and since most of these were amid its influences, their lives and works attest the excellency of its formative power. Nay, we have a sage in our midst who will doubtless bear witness to the truth of our assertions, nor will he refuse to lay bare to us the sum of his requirements in this, his favorite pursuit.

In conclusion let us state that by reason of our limits of space and time we have been unable to give more than an imperfect consideration to the subjects examined. We have undoubtedly succeeded in running counter to the prejudices of many, and may have won the countenance of few. If, however, we have effected the conversion of one inquirer to any of our conclusions, and shall, through him, help to assuage the pangs of a single human heart, we will thank God for this opportunity improved.

THE POLLIO OF VIRGIL.

IN ENGLISH HEXAMETERS.

“———— ipsa ejam carmina rupes,

Ipsa sonant arbusta, Deus, deus ille Menalca.” Ecl., v. 63.

[MY DEAR PENN:—I send you the following poem, neither to introduce the Pollio to your readers—that would be a solecism—nor to vaunt the merit of the English diction—which many of your classical readers could improve. Indeed I have written it so hastily, that there may be a few errors of construction, “Why then does he send it?”]

I have always been an open reviler of Gabriel Harvey, a contemner of Southey—hexametrically—and only tolerant of Longfellow, because I loved his heroine. However, I chanced to be recreating myself with the Pollio, and comparing Pope's semi-version, the Messiah, in glowing pentameters, and I tried an idle hand upon a full version. Pentameters cut the poem up into such curious, paste-colored little stars, that I was quite confused by the kaleidoscopic effects. I turned to hexameters, and with this result. Many of the English verses are almost identical in construction with the Latin; thus the two run together *passibus equis*. The number of verses in each is nearly the same. I am led to infer that the classical heroic poems are best translated into English hexameters, and that, however the ear may be displeased, the sense and handling are thus far better reproduced.]

Muses of Sicily, rouse ye to higher and holier chauntings;
Groves and the tamarisk lowly are not to all the most pleasing;
If 'tis the forest we sing, be our pastoral worthy the concul.

Cometh the last of the ages, foretold by the sibyl of Cumæ,
When the new order springs forth to impallid the old with its glory;
Virgin Astræa returns, and with her the Saturnian kingdoms,
While from the stars cometh down a progeny born in the Heavens.

Favor, O goddess Lucinia, the babe from the womb now proceeding,
By whom the hard age of iron shall cease, and give place to the golden;
When once again in his brightness shall reign thy beloved Apollo.
Pollio, thou, being consul, shalt usher this glory of ages;
Thou being consul and ruler, the months big with marvels shall flourish:
Thou being leader, should yet any traces of evil continue,
They disappearing shall loosen the earth from perpetual terror.

He shall draw life from the gods, and see the gods walking with heroes,
And to both heroes and gods himself be an object of wonder;
While o'er the peace-charm'd earth, he shall reign like the hero his father.

Then in thy honor, O child, uncultured the earth shall bear tribute,
Wandering ivy and bæccar, sweet-pea and laughing acanthus,
She goats with udders o'erflowing, undriven shall come to the milking,
Nor any more shall the flocks hold in fear the magnificent lions;
Even thy cradle itself shall pour forth the sweetest of flowers;
Death shall descend on the serpent, the poison shall die from the hemlock,
And all around thee shall spring the bloom of Assyrian spikenard.

When thou art able to read the praises and deeds of thy fathers,
And in thy pulses shalt feel the spirit and power heroic,
Fields shall begin to grow yellow with soft ears awaiting the sickle,
While the rude thorn of the desert shall droop with the rosy grape cluster,
And the hard trunk of the oak shall sweat with dew-bubbles of honey.

Still may survive some remains of the early inherited evil,
 Tempting to launch on the deep, the cities with ramparts to girdle,
 And the original soil to wrinkle with numberless furrows.
 Then a new Tiplys shall steer, and an Argo be manned with new heroes;
 New wars burst forth, and again shall Achilles encounter the Trojans.

But when thy manhood shall come, the sailor shall give up the ocean;
 Navies shall barter no products, for all things shall grow in all countries;
 Harrows shall no more be needed, nor vine feel the knife of the pruner,
 From the broad necks of the oxen the yoke shall be loosed by the plowman.
 Wool shall not then need the dyer, to counterfeit various colors,
 For, on the backs of the ram, and the lambs as they roam in the meadows,
 Purple and yellow shall shine, the spontaneous hue of the fleeces.

Hark, how the Parcæ concordant sing to their swift-whirling spindles,
 "Come, for the time is at hand, come and receive thy great honors,
 Offspring beloved of the gods, of Jove the magnificent issue!"
 See, even now, how the world bends with its burden of glory—
 Earth and the track of the ocean, the great over-arch of the heavens!
 Lo, how all nature rejoices to hail this the noblest æon!

O that to me may remain the last of a life long expectant,
 And whatsoever of breath may be needed to sing of thy doings;
 Neither in song shall the Thracian, neither shall Linus outdo me,
 Though to the former his mother, Calliope, lend her assistance,
 Though to the latter his father, Apollo, should send inspiration;
 Pan even—Arcady judging—must yield to my powerful singing.

Now, gentle infant begin, by her smiles, to distinguish thy mother,
 To whom ten long months of sorrow have ushered the travail of child-birth;
 Now, tender child, now begin, thou whom no parents have fondled,
 Ere yet the gods can invite thee to sit at the banqueting table;
 Ere yet a goddess may vie to enjoy thy embrace hymeneal.

HENRI DE COISSY.

CONSTITUTIONAL REFORM.

ADDRESS BY HON. FRANCIS JORDAN, BEFORE THE SOCIAL SCIENCE
 ASSOCIATION OF PHILADELPHIA, FEBRUARY, 15, 1872.

MR. PRESIDENT AND GENTLEMEN: It was not without
 reluctance I accepted the invitation of your executive com-
 mittee, to submit to your association my views, in writing, on the
 amendments which should be made to the Constitution of the State,

by the convention about to be called. That reluctance was based not only upon a want of leisure, but a doubt of my ability to do justice to the great subject. I heartily agree with your committee, that "there is no question now before the people of this State more important than the changes to be made in our Constitution." The fact that the people have declared for a convention by a popular majority of about two hundred and fifty thousand votes, may be accepted as an unmistakable declaration that they are in earnest; and that every citizen is expected to do his duty. Even should I fail to accomplish what others might have done, or what might, under more favorable circumstances, be reasonably expected of myself, yet I hope, through the kind aid of your association, at least to attract the attention of others to the grave issues and duties before us, to excite discussion, reflection, and deliberation; and thus lead ultimately to wise conclusion and action. Hence I am here, to contribute my mite into the common treasury of knowledge; indulging the fond hope that many others may be found, who, out of their greater treasures, will cast in more abundantly.

"In American constitutional law the word *Constitution* is used in a restricted sense, as implying the written instrument agreed upon by the people of the Union, or of any one of the States, as the absolute rule of action and decision for all departments and officers of the government, in respect to all the points covered by it, until it shall be changed by the authority which established it, and in opposition to which any act or rule of any department or officer of the government, or even of the people themselves, will be altogether void."

In this discussion we have nothing to do with the Constitution of the United States, except to bear in mind its superior authority as to all powers and jurisdiction conferred by it; and what is written must be construed as applicable only to the Constitution of the State, unless otherwise expressed.

Long ago our wise and patriotic forefathers laid the strong political foundations of our Commonwealth, upon the grand and fundamental principles of equality and justice—"Virtue, Liberty and Independence." By the Constitution, they distributed the powers of the Government into three branches—the legislative, the executive, and the judicial. It is not now proposed, as I

understand it, to destroy or remove these ancient landmarks, to reorganize our Government, or to pull down and reconstruct our social fabric ; but rather to strengthen the old foundations, to fortify against external violence and internal distraction, to impose further restraints upon ourselves and our agents, and to utilize and adorn the noble structure in every part. Under this view of the situation, whilst keeping in remembrance established elementary principles, we may safely dispense with all profound disquisitions upon the science of abstract government, or the philosophy of republicanism ; and accept and build upon that wise system of organic law which we inherited as our birthright, making only such alterations and improvements as time, experience, advanced intelligence and expansion have made necessary. We know by both observation and experience that every alteration is not an amendment, nor every change an improvement. "Prove all things, hold fast that which is good," is an apostolic injunction, as sound in constitutional law as in theology. Our people are slow to move for radical reforms ; and are apt to manifest but little patience or respect for those who clamor for reform generally, but who are unable to point out clearly existing evils, and plausible remedies for their correction. We live in a practical and utilitarian age ; and in the nature of things, the people being the source of all political power, the government "of the people, by the people, and for the people," must conform to and embody the popular ideas, sentiments and convictions. In the vegetable, mineral and animal kingdoms, growth and development are gradual. In our every-day life the greatest amount of happiness results from a proper performance of a multitude of small duties ; and so, I apprehend, it will be found that the greatest practical good, and the best constitutional reform, will result from a number of what many might consider, viewed separately, as comparatively small amendments. The man who will do nothing until the opportunity to do something great occurs, may wait all his life in vain ; whilst he who does with diligence whatsoever his hand findeth to do, may accomplish much. This spirit actuated those who preceded us ; and in wisdom we may follow their example. The first Constitution of the State was adopted in 1776 ; it was amended in 1790, and again by the Convention of 1838. Since then more than thirty years have elapsed ; and in that period no

less than seventeen amendments have been added, at sundry times, by joint resolutions of the Legislature, approved by popular vote. Another Constitutional Convention having now been ordered, the practical question is, what further amendments should it adopt?

I do not understand your association as expecting the *forms* of suggested amendments to be submitted; but rather an enunciation of the principles and ideas which should be incorporated into the Constitution. In accordance with these elementary principles, and general views of the subject, I proceed to enumerate the amendments I have to suggest; accompanying them only with such arguments and explanations as will make them intelligible, and, it is hoped, commend them to public favor.

I. The Constitution should require the Legislature to enact general and uniform laws on every subject which can be so regulated; and prohibit local and special legislation in all cases where the same ends can be attained by general laws.

Special legislation is one of the greatest evils of our system, and of our generation. In a recent letter, upon constitutional reform, in reply to sundry gentlemen of this city, some of whom, I believe, are members of this association, I gave my views, arguments and illustrations on this subject so fully, it is deemed unnecessary to repeat them. In this connection, however, it is considered proper to guard against misapprehension. There are many who favor the principle of conferring large jurisdiction upon the courts; enabling them to do much of what is now accomplished by special and local acts of the Legislature. I differ in opinion with all such. On the contrary, whilst many of these things can be properly done by the courts, as at present, I believe we have gone quite far enough in this direction. I have an abiding faith in the soundness of the system by which the powers of government are divided into the legislative, executive and judicial departments; and it follows that each of these three co-ordinate branches should, as a general rule, be confined to its legitimate and natural functions. All encroachments by the one department on the domain or jurisdiction of the other, are departures from sound and established principles; and if not arrested, or confined to narrow and exceptional limits, will destroy the symmetry of our whole system; and sooner or later

will result in disastrous consequences. Special legislation has demoralized the Legislature, because it has subjected it to temptations greater than it could bear. The judges of our courts are but men, of like passions and infirmities; and it is unwise to subject them to the influences and temptations by which others have fallen. "Lead us not into temptation," is an utterance of divine wisdom; and the principle is applicable at all times, and to all classes.

II. Our Constitution needs amendment in that part which confers authority upon the subject of education. At present it reads thus:

"ART. VII., SEC. I. The Legislature shall, as soon as conveniently may be, provide by law for the establishment of schools throughout the State, *in such manner that the poor may be taught gratis.*"

In a democratic or republican government principle and policy unite in joint protest against all distinctions and discriminations among the people. All such classifications are odious in themselves, and apt to bring any laws which embody them into disrepute, and make them difficult or impossible of enforcement; and especially where such distinctions are made between the rich and the poor. This was the main reason why our early public school laws were a failure; and the present Constitution, though a great advance in the right direction, falls far short of what it ought to be in this respect. Instead, therefore, of the equivocal and invidious provision just cited, I would substitute the clear and manly declaration of the new Constitution of the State of Illinois, as follows:

"The General Assembly shall provide a thorough and efficient system of free schools, whereby all the children of the State may receive a good common school education."

III. What are known as the sinking fund sections of the Constitution should be amended.

These were amendments of 1857; and their history shows how impossible it is to foresee, and properly provide for the indefinite future. The balance in the sinking fund on 30th November, 1869, was \$2,815,545.20, whilst the balance in the Treasury, at the same date, was only \$1,400,862.49. The balance in the sinking fund 30th November, 1870, was \$3,014,529.40, and the balance

in the Treasury, at the same time, was only \$1,302,742.82. The balance in the sinking fund 30th November, 1871, was \$3,478,938.40, and the balance in the Treasury, at same date, only \$1,476,808.59. It thus appears that the balance in the sinking fund is annually increasing, and that the State Treasury is annually becoming more indebted to the sinking fund. The State Treasurer is annually using the moneys in the sinking fund to defray the ordinary expenses of the Government, notwithstanding an existing constitutional prohibition, and the fact that by the seventh section of the act of Assembly creating the sinking fund it is made a criminal offense to use this fund, or any part of it, for any other purpose than the payment of the public debt and interest thereon. This part of the Constitution, and the act to enforce it, are habitually violated by a sworn public officer. The State Treasurer is compelled either to disregard the Constitution and the statute, or prejudice the credit of the State, by refusing to pay current demands on the treasury when there are no funds on hand to meet them, except those in the sinking fund; and practically the former alternative is always chosen. Nothing so induces a contempt for, and disregard of, the law, whether constitutional or statute, as its constant violation with impunity by the sworn officers chosen for its execution; and it can require no further argument to demonstrate the propriety and necessity for some change to remedy this condition of things.

IV. That part of the Constitution regulating the election of justices of the peace and aldermen should be so modified as to adapt its provisions to the public convenience.

It now declares that these officers "shall be elected in the several wards, boroughs and townships, at the time of the election of constables." In practice, this constitutional fixation of the day on which these elections must be held is found very inconvenient in the filling of vacancies; especially in those districts in which but one justice or alderman is authorized by law. In effect, ordinary vacancies, by death, resignation, removal or otherwise, and these offices in newly created districts, have often to go unfilled for almost or quite a year. This might be regarded by some as of minor importance; but the frequency of the annoyances arising from this cause, and the numbers prejudicially affected thereby, occasion more inconvenience and hardship than

other constitutional defects of apparently much greater magnitude. Sundry statutes have been passed in the vain attempt to obviate this difficulty; but it must be apparent nothing but an appropriate amendment to the Constitution is adequate for the purpose.

V. The State Treasurer should be elected by the popular vote, and not by the Legislature.

Sad experience has demonstrated our present mode of election to be unwise. As administered, this is the most profitable office in the State; and as a consequence great efforts are made to secure it. When the Legislature meets, and long before, the members elect are importuned by the candidates and their friends; and it is notorious that legislators are bought and sold in the unseemly and disgraceful scramble which occurs annually at the election of State Treasurer. The Legislature is demoralized at the very commencement of the session; the people of the State are humiliated; and the whole performance is a scandal upon the fair fame of the State. Let us save ourselves from all this, by a proper constitutional amendment, making the treasurer elective by popular vote. The term should be two years; and for obvious reasons the person elected should thereafter be ineligible, at least until one full term had intervened.

VI. The extension of official terms by legislative enactment should be prohibited.

This is one variety of special legislation; but so peculiar, and of such importance, as to justify special notice. Almost every session of the Legislature is occupied more or less by the consideration of bills of this character. Sometimes they include only one officer, and at others a whole class. The incumbents having been elected, or appointed, as the case may be, for the prescribed legal terms, become distrustful of their constituents, or of the appointing power, and appeal to the Legislature to grant them second terms, or at least an extension of existing ones. Combinations are formed, the practice known in legislative parlance as log-rolling is invoked, and every fair and unfair means used to accomplish desired results. Such efforts and practices are departures from all sound and just principles of legislation; the accompanying scenes and conflicts are unseemly, and sometimes

disgraceful; and the whole evil should be sternly prohibited by constitutional amendment.

VII. The compensation of the members of the General Assembly should be fixed by the Constitution.

I have known representatives of character and intelligence, who on all ordinary questions might be regarded as men of principle; who could be safely relied upon for an honorable vote in almost any emergency, and yet who could not resist the temptation to vote for an increase of pay whenever the opportunity was presented. Others there are, of less principle but more cunning, who on such occasions are found exhausting all their ability and ingenuity to secure the coveted increase; and at the same time to make up such a record for themselves that their constituents may not be able to hold them responsible. Such things belittle representatives in the estimation of the public, and in their own estimation; and whatever does this, or has this tendency, is a public evil, and ought, if possible, to be remedied. In this case it can be done by removing the temptation. Let the compensation, therefore, be firmly settled in the organic law; or at least so adjusted that any legislation on the subject shall not apply to those who make it.

VIII. The official terms of the members of the Legislature should be definitely fixed by the Constitution.

In the financial crash of 1857, the banks all suspended specie payments, and it was conceded the Governor should call a special session of the Legislature. But the October election was just at hand, and the question arose, who compose the Legislature?—or, rather, who will compose it after the second Tuesday of October next? It was contended by some that the members already elected continued to be members until the time of meeting fixed by the Constitution, in January. Others argued that by the October election the terms of all old members of the House not re-elected *ipso facto* expired; and that under any proclamation of the Governor for an extra session the new members would take the places of their predecessors. This grave and knotty question was evaded at the time, by the Governor calling an immediate session, on short notice, taking it for granted the members would hurry through the business for which they were specially convened, and adjourn before the election. This was

accordingly done; but the important question raised remained unsettled, and so remains to this day. Suppose a reckless administration in the last year of its power, and the old members of the Legislature in sympathy with it on certain measures, and the people at the October election to have repudiated the measures and the members of the Legislature who were identified with them. What is to hinder the Executive, immediately after the election, or even before it, when the handwriting was already visible on the wall, from convening the old Legislature in extra session, and thus enabling them to consummate their pet schemes, in defiance of the popular will? Even after the election the newly chosen members could not legally attend the place of meeting without notice or authority; and if they made their appearance at the place of meeting, it would only be to find others in their places, and with the power to exclude them. It may be said this is not a supposable case—that no Executive would presume or dare to do this. But why not? Would not such action be in strict accordance with the very letter of the Constitution? Under our theory and system of government the Legislature may lawfully do what it is not prohibited by the Constitution from doing. Constitutional provisions are but restraints upon the powers and agents of the government—in the case supposed, on the Executive and Legislature—and to argue that such restraints are not necessary, is a begging of the question, and a virtual admission that constitutions are unnecessary. In this paper the contrary is assumed. It is assumed also that all apparent defects should be remedied when practicable; and that the people should be thus wisely protected from threatened dangers, lest in times of public commotion, political excitement and party strife, the evils break forth in confusion, anarchy and blood.

The particular day on which the legislative term should begin and end is of secondary importance; but I would suggest the Tuesday next after the election. In this age of mails and telegraphs one week would enable all necessary returns to be made; and the representatives last chosen should be the only ones thereafter to meet and act.

IX. Our Constitution should provide different regulations for filling vacancies in the Legislature.

Disclaiming all intention to cast reflections on any person or

party, it must be confessed our present Constitution does not work satisfactorily in this particular. For example and illustration take the Fourth Senatorial District in this city of Philadelphia. The Honorable George Connell died in October last, after the election of that month, thus creating a vacancy. This death was publicly known at the time, and ever since, to every intelligent person in the State; and yet no practical steps were taken toward filling the vacancy so created until the meeting of the Legislature, more than two months afterward. As a consequence, the people of one-fourth of your large city were unrepresented in the State Senate for a whole month, or one-third of an average session; and the great principle of republican representative government, so far as that district was concerned, were a practical failure.

The same thing has occurred, and may again occur any day, in the House of Representatives. There is no necessity or reason for this deprivation of equal rights; at least none which cannot be remedied by an amendment to our organic law, requiring the elections in such cases to be called by the Speaker of the Senate, or House, as the case may be, or as in other States, by the Governor, within a fixed number of days after the decease of the member, or the occurrence of the vacancy. Ten days is suggested as reasonable. To wait until the meeting of the Legislature to get official notice of the death or vacancy is sacrificing substance to form, and depriving the district of its rightful representation on a mere question of etiquette.

X. A different mode should be provided for choosing the Speaker or presiding officer of the Senate.

This part of the machinery of our Government works badly; and is in great need of radical amendment, or thorough repairs. In 1864, the Senate remained unorganized for almost two months for want of a Speaker, and, during the present session, we narrowly escaped a similar calamity. Observation and costly experience have demonstrated that whenever from this, or any other cause, the two branches of the Legislature are unable to progress with the public business, it is a public misfortune. Inflamed party excitements and conflicts are apt to ensue, prejudicial to the public interests; and whatever is taken off one end of the session is sure to be added to the other; thus prolonging the duration, and

greatly increasing the expenses of the session, with no compensatory public good. Surely the wisdom of this age is more than adequate to the correction of so palpable and unmitigated an evil.

XI. The qualifications of electors should be changed, in two particulars:

1. The rights of citizens being no longer dependent on color, the word "white" should be stricken out from the qualifications of the electors, in conformity with the Constitution and laws of the United States, which are "the supreme law of the land * * * anything in the Constitution or laws of any State to the contrary notwithstanding." Our State has already approved the amendments to the Constitution of the United States which make the word inoperative in this connection; and we owe it to the progressive spirit of liberty to discard the qualification as a useless relic of a by-gone age.

2. Instead of a residence within the election district for ten days preceding the election, as now prescribed, thirty days should be required. Neither the Constitution of 1776 or of 1790 prescribe any definite period of residence; but the present regulation was one of the amendments of 1838. Experience has demonstrated it a mistake. The purity and equality of elections are essential elements of republican government. Our recent history has shown more fraud at elections from this source than from any other. It operates as a perpetual temptation to designing and unscrupulous men. A surplus of voters in one district can be removed on the eve of an election to another where they are wanted; and interested parties can always be found willing to pay the boarding for ten days, and sometimes wages also, to insure the votes of those colonized. But make the required residence thirty days, or upward, and you thereby make it too expensive for practical purposes; and accomplish much to insure the purity of the ballot-box. The inconvenience of a few itinerants should not be permitted to outweigh the graver considerations of honest elections and the public good.

XII. The date of our annual fall elections should be changed from the second Tuesday of October, to the Tuesday next after the first Monday of November.

In my recent letter on this subject of constitutional reform, I

suggested this amendment, "to prevent what is called colonization from surrounding States, and to dispense with one election every fourth year." These reasons not only remain in full force, but since then have acquired additional strength. Under the Constitution of the United States, Congress has the right to fix the times for the election of President and Vice-President, and for the national House of Representatives. At an early day this power was exercised as to presidential elections; and Congress at the present session has enacted that after the year 1876 members of the national House of Representatives shall be chosen, in all the States, on "the Tuesday next after the first Monday in November." Unless we change, therefore, in compliance with this Congressional requirement, we will have two fall elections every alternate year. The surrounding States of New York, New Jersey and Maryland have all anticipated us in this change; and that which was heretofore optional, appealing only to our discretion, has now become imperative.

These twelve propositions are considered important; and the whole, if adopted, would add greatly to the value of our Constitution. Others, less manifest perhaps, but not less valuable, might be submitted, did time and space permit; but the number of pages of this manuscript admonishes me to stop, at least for the present. We live in an age when the great medium of communication with our fellow-men is the public press. The demands upon it are such it often refuses publicity to anything except short communications. One object we all have in view is to enlighten public opinion; and to this end a short address, extensively published, is vastly more effective than a long one unpublished, or presented to the world in partial extracts. It is probable some present expected me to treat on other questions and amendments than those I have enumerated; and such a course would have afforded me great pleasure, but for the considerations just mentioned. Moreover, I intended that what I submitted should be as directly responsive to the invitation of your committee as practicable. The request was to "prepare a paper on the amendments to the Constitution which ought to be submitted to the approaching convention." This is precisely what I have done, to the best of my ability; and so far as practicable in one communication of reasonable length.

To some it might have been more agreeable to have listened to a dissertation on what is known as cumulative voting or minority representation, on the advantages of biennial sessions of the legislature, on an increase of the number of Senators and Representatives of the General Assembly, or upon a change in the tenure and mode of choosing our judiciary. These are all interesting and important questions; but are more or less theoretical and speculative, and open wide fields for argument, investigation and discussion; and the approaching convention may or may not consider them favorably. But, to do justice to any one of them, or to the person who would advocate or oppose them, would require a paper as long as the one now presented for your consideration; and such a paper, in my judgment, however able or learned, would not be a compliance with the request made by your committee. If I have erred in this view of the situation, I regret it; but the error has been made on due reflection, and for it I alone am responsible. It is fortunate, also, that the mistake, if made, is open to correction, by all who see proper to avail themselves of the opportunity.

NOTICES OF SOME OF THE EARLY POETS OF PENNSYLVANIA.

BY THE LATE ISAAC COMLY, OF BYBERRY.

THE first publication in the form of poetry that we have found attempted in Pennsylvania is entitled, "A Paraphrastical Exposition on a letter from a gentleman in Philadelphia to his friend in Boston, concerning a certain person who compared himself to Mordecai," printed in the year 1693, in a small quarto of eight pages. Neither the author nor the printer have thought proper to furnish us with their names. The poetry is wretched, and what little sense is to be found in the work, shows the writer's hostility to Samuel Jennings.*

Dr. Franklin, in the interesting account which he wrote of his early life, tells us that Aquila Rose, who was employed in the printing office of Andrew Bradford, of Philadelphia, "was an in-

*Samuel Jennings was at that time a noted Quaker preacher in Philadelphia.
—Ed. P. M.

genious young man, of an excellent character, highly esteemed in the town, secretary to the assembly, and a very tolerable poet." He died about 1723. Keimer, the printer, "also made verses, but they were indifferent ones." One of his pieces which was published, was an elegy on Aquila Rose.

George Webb wrote, in 1728, some lines in praise of Pennsylvania, in which he says:

"Rome shall lament her ancient fame declined,
And Philadelphia be the Athens of mankind."

This distich is preserved as a specimen, or, perhaps, as the most remarkable passage in Webb's performance. In what manner it was published originally, no account has been transmitted to us. Franklin says Webb had been a scholar at Oxford; he decamped from there and went to London, where he enlisted, and was put on board a ship and conveyed to America, without ever writing to inform his parents what had become of him. Keimer bought his time for four years and placed him in his printing office. "His mental vivacity, and good natural disposition, made him an excellent companion, but he was indolent, thoughtless, and to the last degree imprudent."

Thomas Makin was one of the early settlers of Pennsylvania. In 1689 we find him an usher under George Keith, in the Friends' public grammar school, in Philadelphia, and the next year he succeeded Keith as principal teacher in that seminary. He was afterward several times chosen clerk of the Provincial Assembly. In 1728 and 1729 he inscribed two Latin poems to James Logan; one entitled *Encomium Pennsylvaniae*, and the other, *In laudes Pennsylvaniae, poema, seu descriptio Pennsylvaniae*. Robert Proud, who published an extract from these Latin poems with an English version made by himself, says: "They seem to have been written chiefly for amusement in his old age." Makin's portraiture runs much in the style of narrative in relation to political and natural history. As a specimen of the descriptive we extract the following:

"Fair Philadelphia next is rising seen,
Between two rivers placed, two miles between;
The Delaware and Sculkil, new to fame,
Both ancient streams, yet of a modern name.
The city, form'd upon a beauteous plan,
Has many houses built, tho' late began;

Rectangular the streets, direct and fair;
 And rectilinear all the ranges are.
 Five houses here for sacred use are known,
 Another stands not far without the town,
 Of these appears one in a grander style;
 But yet unfinished is the lofty pile.
 Here psalms divine melodious accents raise,
 And choral symphony and songs of praise,
 To raise the mind, and soothe the pious ear;
 But God devoted minds doth always hear.
 A lofty tower is founded on this ground,
 For future bells to make a distant sound;
 Here schools for learning and for arts are seen—
 In which too many I've a teacher been;
 But one, in teaching, doth the rest excel,
 To know and speak the Greek and Latin well—
 Here too, one spacious building we behold,
 Where all provisions bought are daily sold;
 From whose high steps, too, loudly is proclaimed,
 The annual Magistrate, the Mayor nam'd."

Makin's concluding paragraph is a sort of outline of rural affairs at that time:

"The farmer, provident amidst his cares
 For winter, like the prudent ant, prepares;
 Foreknowing all that summer doth produce,
 Is only for consuming winter's use.
 He fills his barns and cellars with good cheer,
 Against this dreary season of the year;
 He scorns exotic foods and gaudy dress—
 Content to live on homely fare, in peace;
 Sweet to his taste his unbought dainties are,
 And his own *home-spun* he delights to wear.
 His lowly dwelling views his large domain,
 Improved in part, where peace and plenty reign;
 Plain furniture, but useful, he doth chuse,
 And wisely values everything for use.
 In these blest shades may I delight to be—
 Here, little is enough, with peace, for me."

Jacob Taylor, the almanac-maker, we are told, resided in Chester county. In his ephemeris for 1746, he says: "It is now forty-four years since I first published astronomical calculations, which I have frequently continued, but not without several intermissions." Hence, in his address to Wm. Ball, he styles himself

an "old man standing on the margin of the grave." It appears he was not only the author of the calculations which were published under his name, but generally furnished the matter required to fill up the intermediate spaces of the almanac, much of which was metrical composition. We have no account that his poetical works were ever communicated to the public through any other channel. Many of his pieces are historical or descriptive. Some of them are full of sarcasm upon what he considered popular follies and erroneous notions. Most of them partake of an easy flow of expression in general, and indicate a tolerable acquaintance with the art of versification. We are tempted to give an extract from a poem in praise of Pennsylvania, but will refrain for fear of tiring the reader of the early poetry.

In the early times of Pennsylvania, there were few regular bred physicians within the reach of many of the country inhabitants, and those who were affected with disease were necessarily subjected to much serious inconvenience under the treatment of unskillful hands. This state of things naturally introduced a kind of professors upon the Æsculapian stage, whose pretensions to the knowledge of diseases and the art of healing were of a very dubious character. In the progression of improvement, the study of medicine became an object of attention, and by the latter end of the life of Jacob Taylor, physicians of respectable talents and understanding were multiplied so as to be within the reach of most of the inhabitants. But the old school notions were not suddenly abandoned. Taylor endeavored to diminish the attachment to them by sundry publications favorable to a learned and rational system. His story of Whackum furnishes us with his views how the world is deceived on this subject:

"Two months and more poor Whackum lay
In grief and pain both night and day;
The cause was this, a glancing blow,
That missed the timber, found his toe,
From whence a wide and ghastly cut,
Went deep and slanting in his foot.
No flesh or bone or sinew there
The unrelenting steel would spare.
But Whackum's heart was good and stout,
He only wrapt it in a clout.
A child may cry, that's not for men,

Away he went to work again.
 Poor Whackum had but little skill,
 His body foul, his flesh was ill;
 The work of flies began to thrive,
 The stinking wound was all alive,
 And his bold heart grew something sad,
 When he perceived his case so bad:
 And further mischief to prevent
 Full late he to a surgeon went,
 Well versed in art, a man of skill,
 Who understood his business well;
 And brought the cure as finely on,
 As such a work could well be done.
 For had the surgeon's skill been small,
 One leg had been poor Whackum's all.

"The wound was cleansed and almost well,
 When Whackum heard some gossips tell,
 What wondrous cures were lately wrought,
 By gossip Cardius for a groat.
 Away goes he upon his staff;
 The prating dame began to laugh:
 'If you,' says she, 'had let me know,
 You had been sound a month ago.'
 His wound she washed with something warm,
 'Twas pure and clear from good or harm;
 And on a fine white rag she spread,
 A lovely salve like minium red,
 Then with her scissor snipt it round,
 And nimbly laid it on the wound;
 With active fingers small and long,
 As nimbly went the gossip's tongue.

"A footman sound he quickly grew,
 And round the town the rumor flew,
 And wise enough were forty found
 To say the gossip made him sound
 The skillful surgeon only smiled,
 To see how half the world's beguiled,
 For gossip Cardius knows no more
 Than blackface newly come on shore."

It is probably little known at present that our ancestors were many of them believers in the mysterious doctrines of planetary influence, not only as it respected the health of the body, but also that the general characteristics of life might be foretold

by reference to the signs or position of the planets at the juncture of our egress into the world. Judicial astrology had its professors, to whom parents often applied for calculations upon the nativities of their children and a knowledge of their future fortunes. Jacob Taylor endeavored to rectify the public mind on these subjects by an exposition of their absurdity :

" In songs divine the royal psalmist sings,
How all God's works declare him King of kings;
But stupid heathens, gazing on the skies,
Ador'd the stars and filled the world with lies,
Their boasted knowledge free reception found
With listening crowds in superstition drown'd.

" Chaldea once, a place of mighty fame,
With stars and gods did great acquaintance claim,
Idolatry had there its early birth,
There sprang the first idolators on earth;
There fools admiring thought the fools had skill
To solve all doubts and future things to tell.

" In that rank soil the plagues of nature grew,
Magicians, sorcerers—a sordid crew;
Astrologers and wizzards, boasting high
Of mystic arts and knowledge of the sky;
Her monstrous wings the vile contagion spread,
And various ways to distant regions fled.

" When raging pride and wild ambition rise,
And men run mad to be reputed wise,
In church and state some seek a shining name;
Some court the stars for high prophetic fame;
A planetary prophet, roaring loud,
May please and cheat a simple, gazing crowd.

" A cheating knave would find a starving trade,
Were there no fools where markets might be made
Astrologers some reputation gain,
Where ignorance and superstition reign;
When useful learning and good sense prevail,
There they in vain may hoist the spreading sail.

" But now behold what pleasing scenes appear,
Of learned men from pagan idols clear,
Who better understand all nature's frame,
Than ancient sages of the greatest fame,
Who veiled philosophy on pillars strong,
Of mathematics sound and lasting long.

"Serenely bright the art of physic shines.
And superstition every day declines,
Physicians now explore the deepest part,
The dark recesses of their healing art.
Peruse their works, read each instructive line,
You never find the fable of the sign.

"With feeble pens some sons of darkness strive
To keep their dear idolatry alive.
Such wretched writers quick reception gain,
Where parallels run in the reader's brain.
One might surmise a writer so forlorn,
In old Chaldea or in Egypt born."

William Satterthwaite, of Bucks county, was contemporary with Jacob Taylor. We are informed he was born in England, and received a good education in his native country. After having completed his studies, as some say, at one of the universities, he engaged to teach a country school, but soon gave it up and came to Pennsylvania. About 1788 he published a poem under the title of "Mysterious Nothing. By the author of 'Contempt on Revenge.'" What he really meant by the latter expression might have been understood by those who were acquainted with him; but it is now quite unintelligible. Whether "Contempt on Revenge" was a work which he had previously published, or whether these words were used, as an uncertain traditional account informs us, with reference to the occurrence from which he first caught the idea of writing on "Nothing," is uncertain. But we are told two young women requested him to write a piece of verse for them. He afterward inquired of them what subject they wished he should take up; they, suspecting from something that had passed, he intended to write about themselves, inclined to withdraw the application by answering "nothing." This, it is said, he considered contempt, and in revenge—if a disposition of so amiable a character may admit of the name—brought forth his poem on the very subject they mentioned. In his preface "to the generous readers" he speaks of "having known a stormy world, and ever found generosity the best friend of poverty." "Hence," continues he, "my life is become easy"—probably, as Dr. Watson observes on this passage, "by the generosity of Jeremiah Langhorne, Esq." The poem begins with:

"Mysterious nothing—Nothing is my theme,
Nothing, from whence unnumbered bodies came.
Infinite goodness filled immensity,
Before Him nothing could existent be."

In another place he says:

"The morning stars in sacred songs declare
His generous kindness and paternal care.
Nothing so rich as that gay sympathy,
Which joins the soul to this divinity.
Nothing so pleasing to the generous mind,
As His sweet presence in the soul to find.
Nothing so fair as that exalted joy,
Which clothes the soul for blest eternity.
Nothing presents so fair an heaven on earth,
As these sweet pledges of immortal birth :
For nothing warms the radiant powers above,
Like the fair flames of His eternal love."

A second edition of this poem was afterward published with "an elegy on the death of Jeremiah Langhorne, Esq.," and "Providence, a poem." His patron, Langhorne, dwelt near the romantic banks of the Neshamona, in Middletown; he was a member of the Assembly of Pennsylvania at different times from 1703 to 1740, and sometimes was promoted to the speaker's chair. He was a person of wealth and influence, and held in high estimation in Bucks county for his superior understanding and excellent private character. Satterthwaithe eulogizes his virtues with the affection of an ardent admirer.

"Langhorne the great, the good, the just, is dead,
And with his life our blooming joys are fled.
And what remains? an awful gloomy scene,
A weeping province, pious souls in pain.
His bright example shows the best relief,
From seas of sorrow and insulting grief.
See with what patience he serenely bore
Legions of pains armed with their torturing power.
Nor grave physicians with their healing art
Could e'er dislodge them from the internal part;
Nor pious friends with sympathizing care,
Could mitigate their furious conduct there.

"Such was his goodness, and his greatness such,
His slaves were blessings, and his negroes rich.*

* Langhorne bequeathed fifty acres of land to his negroes.

A perfect friend in bold sincerity,
With lords or peasants regularly free.

"He stood the patriot of the province, where
Justice was nourished with celestial care.
He taught the laws to know their just design,
Truth, justice, mercy, hand in hand to join,
Without regard to fear, or hopes, or gain,
Or sly designs of base, corrupted men,
Such were his constant actions, by them he
Did living write his own true elegy."

Satterthwaithe's poem, entitled "Providence," commences with the following lines:

"O gracious power, divinely just and great,
Who rules the volumes of eternal fate;
Thou guard of thought, inspirer of my song,
My thanks to Thee, kind Providence, belong;
Thou wing'st my genius and inspirest my soul,
To sing Thy praises, great Ruler of the whole."

There is a pious effusion of feeling in this little piece, and it is considered a valuable part of the author's productions. Another essay written by him, entitled, "A Religious Allegory of Life's Futurity; Addressed to the Youth," we have seen in manuscript, transcribed by the late Dr. Watson, of Buckingham, who says: "It contains many good sentiments and fine lines; but much of the language appears too bold, and not well adapted to the subject. The writer was a great admirer of the Latin and Greek poets, and endeavored in his compositions to imitate their lofty and strong figures and sonorous numbers."

Thomas Godfrey, son of the original inventor of Hadley's quadrant, we are told, courted the muses from his infancy. He died when a young man. A small volume of his poems was published after his decease, by his friend, Nathaniel Evans. A short account of the author may be found in the *American Magazine*.

In 1772 was published an octavo volume of "Poems on Several Subjects, with other Compositions; by Nathaniel Evans, A. M." He was born in Philadelphia in 1742. Soon after the opening of the academy founded by Franklin and others in 1749, Evans entered it as a student. He spent about six years in grammar learning, when his parents, designing him for mercantile life,

put him apprentice ; but his inclination and genius leading him more to the service of the muses than to the business of the counting-house, soon after the expiration of his apprenticeship he returned to the college and applied himself with great diligence to the study of philosophy and the sciences, till the commencement of 1765, when he was complimented with a diploma for the degree of master of arts. Soon after, he embarked for England, carrying with him recommendations to the Society for Propagating the Gospel in Foreign Parts, as a fit person to supply the new mission then proposed to be opened for Gloucester county, in New Jersey ; and upon the society's nomination he was admitted into holy orders by the Bishop of London. He returned to Philadelphia the latter end of 1765, and entered immediately on the business of his mission, and just lived long enough to show, by the goodness of his temper, the purity of his morals, the cheerfulness and affability of his conversation, and the warmth of his pulpit compositions, how well he was qualified for the sacred office. He died October 29, 1767, in his 26th year, lamented by all who knew him.

The general character of Evans' poems are rural, pious, patriotic, or historical. His mind appears to have been alive to the sensibilities of friendship, and those refined emotions which dignify humanity. His elegy to the memory of Theophilus Grew, professor of mathematics in the College of Philadelphia, introduces to our notice the character of a valuable citizen, of whom few other memorials remain.

" 'Tis Grew descends unheeded to the grave,
With no libation to Castalia's wave.

" To enlarge the soul, and clear the dubious mind,
To unfold celestial wonders to mankind,
To stamp bright knowledge on thy youthful care,
With sweet persuasion and endearing air,
With gentle manners to entice the heart,
Was once thy happy and peculiar art.
Oh ! may my soul by thy example warm'd,
With virtue's rules and virtue's sons be charm'd,
Regard them tho' they shine in humble state,
Far from the glitter of the wealthy great.
Blest man, in counsel as in sense profound,
True to thy trust and ever blameless found.

Stranger to strife, a noble mind confest,
 No raging discord harbored in thy breast.
 Peaceful thou walked this wild of "weeds and flowers"
 Where envy hisses and blind fortune showers,
 Where systems endless frantic zeal inspire,
 Warm youth they madden and old age they fire.
 Led by no mode, thou follow'd nature's laws,
 And trusted in the one unerring cause.

"Thus pass'd thy footsteps thro' this mazy round,
 Whilst thy wing'd genius soar'd to worlds around.
 Till gristly death with darkness clos'd thy eyes,
 And angels snatched thy spirit to the skies."

NOTES IN CLASS.

SYSTEM OF DESCARTES.—SECOND PAPER.

SIR WILLIAM HAMILTON has said that "the theory of occasional causes is necessarily involved in Descartes' doctrine of assistance—his explanation of the connection of mind and body reposes on that theory. He rejects all physical influence in the communication and conservation of motion between bodies, which he refers exclusively to the ordinary concourse of God (*Princ. Philos.* II., art. 36); consequently he deprives *conflicting* bodies of all proper efficiency, and reduces them to the mere *occasional causes* of *this* phenomenon. The disciples only explicitly evolve what the writings of their master implicitly contain."* In his "Metaphysics"† Sir William further says:

"The system of assistance or occasional causes belongs to Descartes." More cautiously he says afterward (p. 209): "This is *involved* in the Cartesian Philosophy, and therefore belongs to Descartes, but it was fully evolved by De la Forge, Malebranche and other followers of Descartes." On page 214 he says, still more cautiously: "His disciples have evolved the hypothesis of occasional causes, an hypothesis at least contained implicitly in his philosophy." Sir William's later statements seriously qualify his first and facts do not unmistakably warrant his inferences. The sole passage in Descartes to which either Hamilton or his editor alludes

* Discussions. New York: Harper & Bros., 1868. 77. † Lect. xvi.

as sustaining the statement is, in "The Principles of Philosophy," part ii., § 36. There is nothing whatever in the passage cited which involves, of necessity, the doctrine of occasional causes. It is as follows: "The cause of motion may be considered as twofold. First, universal and primary, which is the general cause of all the motions which are in the world. The second is *particular*, from which it comes that the single parts of matter acquire motions which they had not before. As to the general it is manifest that it is no other than God Himself, who created matter in the beginning with motion and quiet, and now, by his sole *ordinary* concurrence (*per solum suum concursum ordinarium*) preserves (*conservat*) so much of motion and quiet as He then placed in that total (*ea tota*.) For although that motion be nothing more in the matter moved than its mode, yet it has a certain and determinate quantity which remains the same in the entire universe, although it be changed in its single parts. When one part of matter is moved twice as fast as another, and the second is double the size of the first, there is precisely as much motion in the smaller body as in the larger, and by so much as the motion of one part is rendered slower, by so much is the motion of another part, equal to it, rendered swifter. God preserves all this matter in the same mode, and the same relation [and with the same laws] in which He first created it." These words contain one of Descartes' great anticipations. "In this passage of Descartes is presented not simply the principle that the quantity of *matter* is unchangeable, but also the principle that the sum of *power* remains the same—a principle whose full significance has come to be recognized in our own century, in which the theory is accepted that the qualitative changes are simply changes in the movements of molecules, and in which we have learned the transmutation of mechanical movement into the movements of molecules, and *vice versa*, so that force can change itself into heat, and heat change itself into force."*

So far as the words of Descartes which we have quoted bear upon the question of occasional causes, they imply no more than that the continuance of that which began with God's creative power depends upon his conservative power. The will which made is the will that keeps. Because of God's ordinary conserva-

* Kirchmann on Descartes. Philosoph. Biblioth., No. 70, p. 67.

tive power things continue to have the qualities and functions conferred on them in the original creation. It is, therefore, the theory of *ordinary assistance*, and does not necessitate the doctrine of occasionalism. It is a blunder to confound such a view of concurrence with the doctrine of occasionalism.

So far in fact from consciously tending to such a stupendous system of the *Deus ex machinâ* order—a system which would so cheapen miracles, that the only real miracle at length would be something natural—one of Descartes' grandest efforts was to simplify and reduce to an order of nature what philosophy itself had obscured by resorting to suppositions of occult qualities, and other refuges of learned ignorance. After speaking (*Princ. Philos.* IV. 187), of the amazing phenomena, acknowledged to be capable of explanation from familiar principles, he says: "There are no occult powers, no miracles of sympathy or antipathy so stupendous, nothing, in a word, in the whole universe, nothing which can properly be referred to purely corporeal causes, causes destitute of mind and cogitation, the reason of which cannot be derived from the same acknowledged principles—so that no other need be added to them." "In the greatness of this thought," says the most recent commentator on Descartes, "he has not been surpassed in all later times; even the present time is not bold enough for it." "What is peculiar in Descartes, and makes him so exalted, is not merely the simplicity of his principles, but also the demonstration of the manner in which in strict consonance with those principles the concrete actually results, and his sweep of view which overlooks none of the phenomena of nature. In this respect Descartes stands far above all the philosophers of antiquity."*

If Descartes' principles involve the doctrine of occasionalism, he did not know it. Up to the point to which his own construction of the logic of his position had led him, his views are in conflict with that scheme and assume a real causal relation between external matter, the personal organ and the thinking subject. This we can show from his own words, in his work on "The Principles of Philosophy." Of this work the Latin is the original (1647). We compare it with the French of the Abbe Picot (1647), which was approved by Descartes, "It is clearly established that the

* Kirchmann. Note 214, on Descartes' Prinzipien der Philosophie.

soul not in so far as it is in each of the members, but only in so far as it is in the brain, perceives by means of the nerves (*nervorum ope*).” In the French it is: “Solely so far as it is in the brain whose nerves, by their movements convey to it the different actions of external objects which *touch* the parts of the body in which they (the nerves) are inserted.” In this there is a distinct assertion that there is a real relation between the nerves and brain, and the brain-organ and the soul; and there is an anticipation of the assertion of Sir William Hamilton, on which he lays stress, apparently as if it were new with him, that all sensation is the result of contact of the thing perceived with the organ. (*Metaphysics*, lect. xxv.) Descartes argues, from brain disease, from sleep, from nerve obstruction, and from nerve removal or partial excision, and the continuance of sensations which the mind refers to parts of the body which have been separated from it, “The cause is not in those members where it is felt, but in some place [French: *quelque lieu*] nearer the brain, through which pass the nerves which are stretched from the former (members) to the brain.” [French: “The nerves which give sensations to the soul.”]

Paragraph 197 is devoted to the proof that the mind is of such a nature that from the motion alone of the body the various sensations can be excited in it. (*Mentem esse talis naturæ, ut a solo corporis motu varii sensus in ea possint excitari.*) It is not to be forgotten that when Descartes makes thinking the essence of the soul, he makes thinking coextensive with consciousness; he covers by the word thought (*cogitatio*), every species of intellectual operation, cognition, emotion, will, sensation. “Under the name of cogitation is included everything which is so in us that we are *immediately* conscious of it. Hence all the operations of the will, understanding, imagination and senses are cogitations.”*

His solution of the operations of external nature through the nervous system on the mind is, that it lies in the constitution of the mind. “*Talem esse nostræ mentis naturam.*” “Our mind is of such a nature (*talis naturæ*), that from certain local motions it can suffer (*pati possit*) the affections of all the senses;” and as Descartes allows a real causality inward, from the external world upon the soul, so does he allow a real causality outward, from

* *Responsio ad Secundas Objectiones*, Amstelodami, 1865, p. 85. *Œuvres* (Cousin) I. 451. (*Aimé-Martin*) p. 120.

the soul upon the body. "Voluntary motion has cogitation as its primary source (*cogitationem pro principio habet*);" [has in fact the will as its principle—*à la vérité la volonté pour son principe.*]

So far, indeed, is Descartes from excluding the body of man from a real, causal participation in the phenomena of mind, that it would be an easy task to pervert many passages in his writings to the purposes of materialism. As some have strained his statements to a system of occasionalism, which does away with the reality of human nature, others have strained his statements, so as to pretend to find an atheistic tendency in them.

The views of Descartes, in regard to the relation of soul and body, are set forth in the fourth book of the "Principles of Philosophy," the fourth chapter of "Dioptrics," and the first part of his work on the "Passions." In the fourth chapter of the "Dioptrics" he says:

"It is clear that it is the soul, not the body, which perceives." In proof of this he appeals to those states of the mind in which, in "ecstasy, or in transporting emotion, or in profound contemplation, it is, as it were, apart from the body." "And the body, in this state, seems to be torpid—without sensation—no matter what object may be presented to it." He goes on to say: "Nor is it any less clear that the soul—properly speaking—does not perceive, as it is in the organs of the outward senses; but, as it is in the brain, where it exercises that faculty which is called common sensation" (*sensum communem*). "Thus wounds and diseases which injure the brain take away all the senses, though the body is still alive." In the next paragraph he shows that sensation takes place by means of the nerves. "We know that impressions, by which objects affect the external parts of the body, reach even to the soul, only through the interposed nerves." And he then goes on to discuss the nature of the nerves.

A great deal is said, in the old writers, of the "animal spirits," which seems to correspond closely, with what would be termed by some now, the "magnetic fluid"—the electric and galvanic forces of the body. The amplest discussion which Descartes gives of the relation of the soul and body is presented, in his work on the "Passions," 1st part, 30th article. He says: "The soul is really joined to the whole body, nor can it be properly said that it is in a certain part, so as to exclude the others." His argument

on this shows, that he means that the relation of soul to body, is that of one absolutely indivisible, unextended whole, to an organism, divisible indeed into parts, but indivisible as an organism; that is, while it is an organism at all, even though mutilated, it is one organism. "The mind can, by no means, be conceived of as having a half, or a third, or as occupying extension. It is not less, if some part of the body be removed, and when the structure of its organs is dissolved, it is separated entire." That to which the soul is joined is, in a word, not the *parts* of the body as separate, but to the whole body as an organic unity. This is the real meaning of the expression, 'joined to the whole body.' Again—31st article—he says: "Though the soul be joined to the whole body, there is a certain part, in which the soul exercises its functions more specially than in all the others. The common opinion is, that this part is the brain or heart. The brain, because, the organs of the senses are referred (*referuntur—se rapportent*) to it; and the heart, because, as it were, the passions are perceived in it. But carefully examining the matter, I seem to myself clearly to know that the parts of the body in which the soul exercises *immediately* [immediately is the keyword] its functions, is not at all the heart, nor even the brain entire, but only that inmost of the parts of the brain, a certain little gland, in the middle of the brain's substance."

In these words of Descartes are to be noticed how carefully he guards his expression, "The soul exercises its functions." He distinguishes, by the word "immediately," between that direct and proper activity, which has no medium, and which is peculiar to the relation between brain and soul, and that mediated relation, through the nerves or animal spirits, which the soul holds to the rest of the body. Descartes' theory, therefore, is, that the soul exercises its functions through the brain and is so far joined to the brain, and to the brain alone; and that its conjunction with the whole body is a secondary one, and derivative from the relation to the brain.

His selection of the middle or pineal gland rests upon this argument: "All the other parts of the brain are double, correspondent with two eyes, two hands and two ears. As the thought of one thing is one, and simple, there must be a place where the two images or two impressions of the double organs can come

together before they reach the soul. There is no other part of the body in which the two impressions can be united except in this gland."

GERMAN CHIPS: GOETHE AND OTHERS.

OUR interest in public affairs is for the most part mere philistery.

EVERYTHING Spinozistic in poetry becomes Machavellian when translated into reflection.

MYSTICISM is the scholasticism of the heart, the dialect of feeling.

THE test of the love of the truth is ability to find and to prize the good.

OLD age loses one of the chief rights of man. We judge an old man with indulgence.

A TALENT is made perfect in solitude, but a character only in the stream of the world's life.

AUTHORITY, that is whatever has once been done, said or decided, has great worth; but only a pedant makes it everything.

MYTHOLOGY—*luxé de croyance*. The whole Bible rightly appears to have been written with the view to show us God's government in little things.—*Hamann*.

WERE everything of the sort lost that had ever been written and still survives, yet one could completely reconstruct poetry and rhetoric from Shakespeare's *Henry the Fourth*.

How can a man come to know himself? Never by meditating on himself, but by the business of his life. Try to do your duty and then you will know pretty closely what is in you. But what is your duty? What each day demands of you.

FOR this reason the Bible is always a book of influence, since so long as the world stands no one will ever rise up and say, "I grasp its conception as a whole, and understand its particular parts." We are rather contented to say: "As a whole it is worthy of reverence, and in its particular parts applicable to life."

EVERY man must think in his own way, for he always finds in his path something of the truth, or some method of truth, which helps him through life. Only he must not let it lead him; he must control himself. The mere bare instinct is not a fitting guide for man.

IF I am to attend to what another opines, let him speak out positively what he thinks. I have guess-work enough in my own mind.

MEN who think deeply and earnestly stand but poorly with the public.

HISTORY'S best gift is the enthusiasm that she awakens.

ABOUT the 10th of March we shall issue a supplement to the March number, containing the Annual Report of the American Iron and Steel Association. The April number will contain articles by H. C. Carey, and by Mr. Whitney, on Apprentices, etc.

NEW BOOKS.

Received from James R. Osgood & Co., and for sale by Claxton, Remsen & Haffelfinger. "YESTERDAYS WITH AUTHORS," by J. F. Field; and "MOUNTAINEERING IN THE SIERRA NEVADA," by Clarence King.

"Yesterdays with Authors," is a volume containing short sketches of Pope, Thackeray, Hawthorne, Dickens, Wordsworth and Miss Mitford. All these papers save Miss Mitford's letters, have already appeared in *The Atlantic Monthly*, in a series of articles called "Our Whispering Gallery," and are well worth reading.

From D. Appleton & Co., and for sale by J. B. Lippincott & Co., "THE POEMS OF HENRY ABBEY." Also, "TWO PLUNGES FOR A PEARL," a novel by Motimer Collins; and "MOHAMMED ALI AND HIS COURT," by Mrs. Mutsbast; and a "TEXT-BOOK OF GEOLOGY" for schools and colleges, by H. Alleyne Nicholson.

THE
PENN MONTHLY.

APRIL, 1872.

SCIENCE AND ITS METHODS.*

THE first man, when he had day after day even for a single week witnessed the rising and the setting of the sun, the former having invariably been accompanied by the presence of light, while the latter had as invariably been followed by its absence, had thus acquired the first rude elements of positive knowledge, or science. The cause—the sun's rising—being given it would have been beyond his power to conceive that the effect should not follow. With further observation he learned to remark that at certain seasons of the year the luminary appeared to traverse particular portions of the heavens, that then it was always warm, and the trees put forth leaves to be followed by fruit; whereas, at others, it appeared to occupy other portions of the heavens, the fruit then disappearing and the leaves falling, as a prelude to the winter's cold. Here was a further addition to his stock of knowledge, bringing with it foresight, and a feeling of the necessity for action. If he would live during the season of cold he could do so only by preparing for it during the season of heat, a principle as thoroughly understood by the wandering

* First published in Mr. Carey's *Principles of Social Science*. Revised and rewritten for this Magazine.

Esquimaux of the shores of the Arctic ocean, as by the most enlightened and eminent philosopher of Europe or America. †

Earliest among the ideas of such a man would be those of space, quantity and form. The sun was obviously very remote, while of the trees some were distant and others were close at hand. The moon was single, while the stars were countless. The tree was tall, while the shrub was short. The hills were high, and tending toward a point, the plains being low and flat. We have here the most abstract, simple and obvious of all conceptions. The idea of space is the same whether we regard the distance between the sun and the stars by which he is surrounded, or that between the mountains and ourselves. So, too, with number and form, which apply to the sands of the sea-shore as readily as to the gigantic trees of the forest, or to the various bodies seen to be moving through the heavens.

Next in order would come the desire, or the necessity, for comparing distances, numbers and magnitudes, the means for this being at hand in machinery supplied by nature, and always at his command. His finger, or his arm, would supply a measure of magnitudes, his pace doing the same by distance; and the standard with which he would compare the weights would be found in

† "These facts, that science and the positive knowledge of the uncultured cannot be separated in nature, and that the one is but a perfected and extended form of the other, must necessarily underlie the whole theory of science, its progress, and the relations of its parts to each other. There must be serious incompleteness in any history of the sciences which, leaving out of view the first steps of their genesis, commences with them only when they assume definite forms. There must be grave defects, if not a general untruth, in a philosophy of the sciences considered in their interdependence and development, which neglects the inquiry how they came to be distinct sciences, and how they were severally evolved out of the chaos of primitive ideas. * * * Is not science a growth? Has not science, too, its embryology? And must not the neglect of its embryology lead to a misunderstanding of the principles of its evolution and of its existing organization? There are *à priori* reasons, therefore, for doubting the truth of all philosophies of the sciences which tacitly proceed upon the common notion that scientific knowledge and ordinary knowledge are separate; instead of commencing, as they should, by affiliating the one upon the other, and showing how it gradually came to be distinguishable from the other. We may expect to find their generalizations essentially artificial, and we shall not be deceived."—HERBERT SPENCER, *Genesis of Science*.

some one among the most ordinary commodities by which he was surrounded. In numerous cases, however, distances, velocities, or dimensions proving to be beyond the reach of direct measurement, there is thus produced a necessity for devising means of comparing distant and unknown quantities with those that being near can be ascertained; and hence arises mathematics, or The Science—so denominated by the Greeks, because to its aid was due nearly all the positive knowledge of which they were possessed.

The multiplication table enables the plowman to determine the number of days contained in a given number of weeks, and the merchant to calculate the number of pounds contained in his cargo of cotton. By help of his rule, the carpenter determines the distance between the ends of the plank on which he works. The sounding-line enables the sailor to ascertain the depth of water around his ship, and by aid of the barometer the traveler determines the height of the mountain on which he stands. All these are *instruments* for facilitating the acquisition of knowledge; such, too, being the formulæ of mathematics by help of which the philosopher determines the magnitude and weight of bodies distant from him millions of millions of miles, and is thus enabled to solve innumerable questions of the highest interest to man. They are the key to science, but are not to be confounded with science itself, although often included in the list of sciences, and even so recently as in M. Comte's well-known work. That such should ever have been the case has been due to the fact that so much of what is really physics is discussed under the head of mathematics: as is the case with the great laws for whose discovery we are indebted to Kepler, Galileo and Newton. That a body impelled by a single force will move in a right line and with a velocity that is invariable, and that action and reaction are equal and opposite, are facts at the knowledge of which we have arrived in consequence of pursuing a certain mode of investigation; but when obtained, they are purely physical facts, obtained by help of the instrument to which we apply the term mathematics—and which is, to use the words of M. Comte, simply “an immense extension of natural logic to a certain order of deductions.”*

* *Positive Philosophy*, Martineau's Translation, vol. i. p. 33.

Logic is itself, however, but another of the instruments devised by man for enabling him to obtain a knowledge of nature's laws. To his eyes the earth appears to be a plane, yet does he see the sun rising daily in the east and setting as regularly in the west, from which he might infer that it would always continue so to do; but of this he can feel no certainty until he has satisfied himself why it is that it does so rise and set. At one time seeing the sun to be eclipsed, while at another the moon ceases to give light, he desires to know why such things are—what is the law governing the movements of those bodies; having obtained which he is enabled to predict when they will again cease to give light, and to determine when they must have done so in times that are past. At one moment ice or salt melts; at another gas explodes; at a third, walls are shattered and cities are hurled to the ground; and he seeks to know why these things are—what is the relation of cause and effect? In the effort to obtain answers to all these questions he observes and records facts, then arranging them with a view to determining the laws by virtue of which they occur—and he invents barometers, thermometers and other instruments to aid him in his observations, but the ultimate object of all is that of obtaining an answer to the questions: Why are all these things? Why is it that dew falls on one day and not on another; Why is it that corn grows abundantly in this field and fails altogether in that other? Why is it that coal burns and granite will not? What, in a word, are the laws instituted by the Creator for the government of matter. The answers to these questions constitute science—and mathematics, logic, and all other of the machinery in use, are but instruments used by him for the purpose of obtaining them.

Discussing the subject of rational mechanics under the head of mathematics, M. Comte informs his readers that we here “encounter a perpetual confusion between the abstract and the concrete points of view; between the logical and the physical; between the artificial conceptions necessary to help us to general laws of equilibrium and motion, and the natural facts furnished by observation, which must form the basis of the science.”* This, however, is only saying that as “the natural facts,” furnished by observation, increase in number, there arises a neces-

**Positive Philosophy*, Martineau's Translation, vol. i. p. 107.

sity for endeavoring to perfect the machinery by help of which they are to be studied; and that such is the case in the instance here referred to is shown in M. Comte's admission that the science of which he treats is "founded on some general facts, furnished by observation, of which we can give no explanation whatever."* Passing from gate to gate of science we pass from simple to compound locks, requiring additional wards in the keys by which they are to be opened; but the key still remains a key, and can never become a lock, even though the wards become fifty-fold more numerous than those of any yet constructed by Bramah, Chubb or Hobbs, and require years of study for acquiring its proper management. There arises then what may be called the science of the key, but it constitutes no part of natural science. When D'Alembert made, to use the words of Comte, "a discovery, by help of which all investigation of the motion of any body or system might be converted at once into a question of equilibrium," he merely opened a new ward in the key by which we were to unlock the cabinet of nature, and thus enlarge the boundaries of that department of knowledge which treats of the properties of matter and the laws by which it is governed, and known as physical science.

§ 2. Abstract mathematics necessarily took precedence of the more concrete physics, because they were the sole product of logic, and dependent upon those first principles which are in their elements so nearly intuitive that when a boy commences the study of geometry he finds that he had already acquired a knowledge of much that is now being given to him as a science. Hence, too, it was that moral science, poetry, the fine arts, and metaphysics were so far advanced in Greece, while mechanical science had scarcely an existence.

In default of observation, men of speculative habits looked inward to their own minds and invented theories that were given to the world as laws, but, as has well been said: "Man can *invent* nothing in science or religion but falsehood, and all the truths that he *discovers* are but facts or laws that have emanated from the Creator." The men of the Middle Ages—the philosophers of the schools—taught the theories that had been invented by their Grecian predecessors, leaving it for Bacon to teach the philosophy

* *Positive Philosophy*, Martineau's Translation, vol. i. p. 117.

that leads to the search for truth among the facts of nature and not among the speculations of men. From his day to the present there has been a perpetual tendency toward the substitution of careful observation and induction for the dreams of theorists, and as the Cartesian doctrine of Vortices gave way to the discovery of gravitation, so the imaginary phlogiston of Stahl, and the Plutonian and Neptunian cosmogonies have yielded to the discoveries of modern science. The former was early displaced by the oxygen of Lavoisier, while the latter held their ground until disproved by the observations of geologists, whose branch of science dates its existence but little beyond the present century.

In physics, the more abstract and general has in its development tended to take precedence of that which is concrete and special, both, however, moving gradually onward, each aiding and aided by the other. Astronomy, the science of the laws governing bodies exterior to our own planet, was studied at an early period, the shepherds of Chaldea having carefully noted the movements of the celestial bodies, and Babylonians having calculated eclipses thousands of years before the commencement of the Christian era. From a well in Syene Eratosthenes obtained the observations required for determining the terrestrial meridian; and many centuries before Copernicus, Archimedes taught the double motion of the earth around its axis and around the sun. The precise length of the solar year was determined by Hipparchus, corresponding within ten minutes with the figures obtained by both Mexican and Etrurian observations.

The motions of the celestial bodies were thus early studied and comprehended, yet it was left to Newton to discover the reason why the apple falls to the earth; to Franklin to discover the identity of lightning and electricity; to Cavendish to discover the composition of the air we breathe; and to philosophers of our own day to discover the laws in virtue of which we see and hear. Laplace's great work of *Celestial Mechanics* was the product of the same period that witnessed the birth of a new science having for its object to determine the composition of the globe on which we live and move, and from which we derive our daily bread. It is thus as we approach nearer to man, his uses and purposes, we find the greatest retardation of that positive knowledge so early attained in reference to the method to be pursued in the effort for

its attainment. The study of the history of science leads inevitably to an agreement with Buffon in the opinion that "however great may be our interest in knowing ourselves," we probably "understand better all that is not ourselves"—and with Rousseau in the belief that "much philosophy is required for observing the facts that are very near to us."

Passing from the more abstract and general laws governing the movements of distant bodies toward those determining the composition of the matter by which we are surrounded, we find new laws, but all in harmony with those first obtained. Chemistry, following physics which deals with masses, deals with the elements of which they are composed, giving us atoms as obedient to the laws of gravitation as are the earth, the satellites of Jupiter, and Jupiter himself. "The distinction between physics and chemistry," says M. Comte, "is much less easy to establish than between chemistry and astronomy, and," as he continues, "it is one more difficult to pronounce upon from day to day as new discoveries bring to light closer relations between them."* That such is the case will readily be seen by the reader who reflects how much of the present great development of physical knowledge has been due to the labors of Cavendish, Priestley, Black, Davy, Lavoisier, Fourcroy, Gay-Lussac and other eminent chemists.

On another occasion M. Comte thus shows the intimate relation between physics on one side of chemistry, and physiology on the other:

"By the important series of electro-chemical phenomena chemistry becomes, as it were, a prolongation of physics; and at its other extremity, it lays the foundation of physiology by its research into organic combinations. These relations are so real that it has sometimes happened that chemists, untrained in the philosophy of science, have been uncertain whether a particular subject lay within their department, or ought to be referred either to physics or to physiology."†

As yet, he is of opinion that "the direct dependence of chemistry on astronomy" is very slight, but

* *Positive Philosophy*, Martineau's Translation, vol. i. p. 216.

† *Ibid.*, vol. i. p. 298.

"When the time shall come for the development of concrete chemistry, that is, the methodical application of chemical knowledge to the natural history of the globe, astronomical considerations will no doubt enter in where now there seems no point of contact between the two sciences. Geology, immature as it is, hints to us such a future necessity, some vague instinct of which was probably in the minds of philosophers in the theological age, when they were fancifully and yet obstinately bent on uniting astrology and alchemy. It is, in fact, impossible to conceive of the great intestinal operations of the globe as radically independent of its planetary conditions."*

Passing thus from the masses of physics through the atoms into which they are resolved by chemistry, we next find those atoms arranging themselves in organized and living forms, and constituting the still more special subjects of vegetable, animal and human physiology, whose connection with chemistry is thus described:

"Physiology depends upon chemistry both as a point of departure and as a principal means of investigation. If we separate the phenomena of life, properly so called, from those of animality, it is clear that the first, in the double intestinal movements which characterizes them, are essentially chemical. The processes which result from organization have peculiar characteristics; but apart from such modifications, they are necessarily subjected to the general laws of chemical effects. Even in studying living bodies under a simply statical point of view, chemistry is of indispensable use in enabling us to distinguish with precision the different anatomical elements of any organism."†

Again, in treating of biology, he says:

"It is to chemistry that biology is by its nature most directly and completely subordinated. In analyzing the phenomena of life, we saw that the fundamental acts which, by their perpetuity, characterize that state, consist of a series of compositions and decompositions; and they are therefore of a chemical nature. Though in the most imperfect organisms, vital reactions are widely separated from common chemical effects, it is not the less true that

**Positive Philosophy*, Martineau's Translation, vol. i. p. 299.

†*Ibid.*, vol. i. p. 300.

all the functions of the proper organic life are necessarily controlled by those fundamental laws of composition and decomposition which constitute the subject of chemical science. * * * Chemistry must clearly furnish the starting-point of every rational theory of nutrition, secretion, and, in short, all the functions of the vegetative life considered separately; each of which is controlled by the influence of chemical laws, except for the special modifications belonging to organic conditions."*

It is not, however, with chemistry alone that physiology is connected. Remote from astronomy as that department of knowledge appears to be, the relation between them "is more important," says M. Comte, "than is usually supposed. I mean," continues he, "Something more than the impossibility of understanding the theory of weight, and its effects upon the organism, apart from the consideration of general gravitation. I mean, besides, and more specially, that it is impossible to form a scientific conception of the conditions of vital existence without taking into the account the aggregate astronomical elements that characterize the planet which is the home of that vital existence. * * * *

"It may at first appear anomalous, and a breach of the encyclopedical arrangement of the sciences, that astronomy and biology should be thus immediately and eminently connected, while two other sciences lie between. But indispensable as are physics and chemistry, astronomy and biology are by their nature the two principal branches of natural philosophy. They, the complements of each other, include in their rational harmony the general system of our fundamental conceptions. The solar system and Man are the extreme terms within which our ideas will forever be included. The system first, and then Man, according to the positive course of our speculative reason: and the reverse in the active process: the laws of the system determining those of Man, and remaining unaffected by them. Between these two poles of natural philosophy the laws of physics interpose, as a kind of complement of the astronomical laws; and again, those of chemistry, as an immediate preliminary of the biological. Such being the rational and indissoluble constitution of these sciences, it becomes apparent why I insisted on the sub-

* *Positive Philosophy*, Martineau's Translation, vol. i. p. 379.

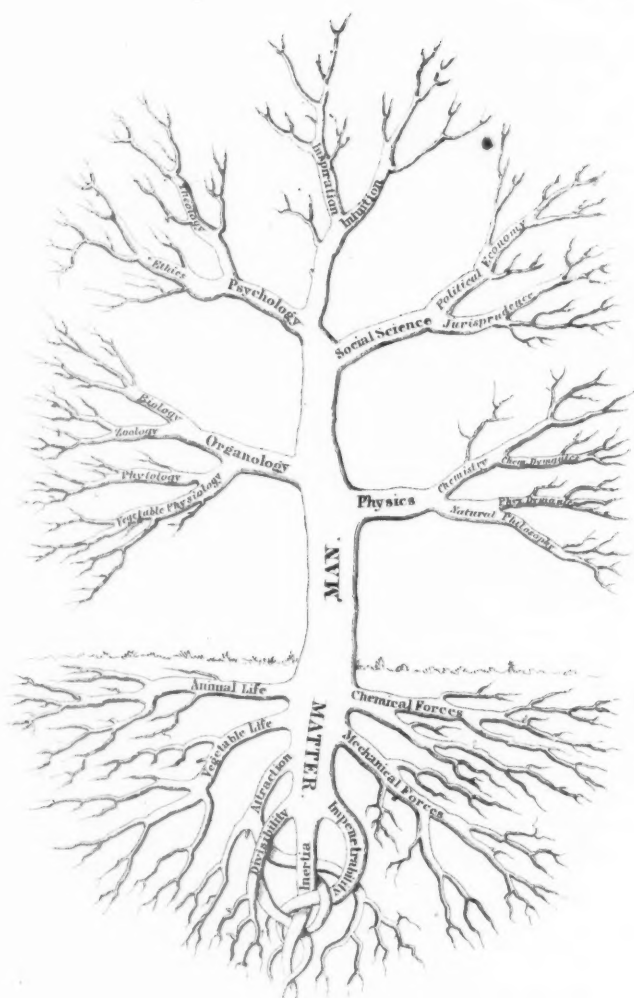
ordination of the study of Man to that of the system, as the primary philosophical characteristic of positive biology."

Passing now toward the more concrete and special department of knowledge treating of the relation of man with his fellow-man, and with the earth from which he derives his means of support, we find chemistry laying the foundation for it when "abolishing the idea of destruction and creation,"* and thus establishing the facts that the consumption of food is but a necessary step toward its reproduction; that in all the processes of agriculture man is but making a machine which supports him while engaged in making it; that the more time and mind he devotes to the development of the powers of the earth, the greater must be his power of consumption; and, that the more rapidly the consumption of food follows its production the more prompt will be the reproduction of the elements required for new supplies thereof. These views of the effect of the principle thus established had not occurred to M. Comte, but he shows clearly the direct connection of chemical and social science when telling his readers that

"Before anything was known of gaseous materials and products, many striking appearances must inevitably have inspired the idea of the real annihilation or production of matter in the general system of nature. These ideas could not yield to the true conception of decomposition and composition till we had decomposed air and water, and then analyzed vegetable and animal substances, and then finished with the analysis of alkalies and earths, thus exhibiting the fundamental principle of the indefinite perpetuity of matter. In vital phenomena, the chemical examination of not only the substances of living bodies, but their functions—imperfect as it yet is—must cast a strong light upon the economy of vital nature by showing that no organic matter radically heterogeneous to inorganic matter can exist, and that vital transformations are subject like all others to the universal laws of chemical phenomena."

The exhibit thus made by M. Comte of the close relation of the various departments of science has been not only confirmed but extended at every stage of progress since he wrote. In his recent address, delivered before the British Association, its President, Sir William Thomson, told its members, that "the earn-

**Positive Philosophy*, Martineau's Translation, p. 305.



est naturalists of the present day," not appalled by difficulties, were "struggling boldly and laboriously to pass out of the mere natural history stage of their study, and bring zoölogy within the range of natural philosophy." The course of things is thus upward and onward, chemistry aiding in the development of physics, the researches of physiologists meanwhile making new demands upon, and thereby promoting the growth of, chemical science. Each helps and is helped by the other.

The root, the stem, the branches, the leaves and the blossoms of the tree are obedient to the same system of laws. Colored water applied to the root changes the color of the blossom, and stoppage of nourishment to the root destroys the tree. It is still but a single tree, and so is it with the tree of science, whose root is found in physics, its stem branching into those divisions which are based upon observation and experiment, leaving us to find the leaves, the blossoms and the fruit in the less demonstrable departments of knowledge.

That this is true as regards the more abstract and general portion of science, to which reference has here been made, can scarcely now be doubted. Wherefore, then, should we doubt that it would be found equally so in relation to those more concrete and special which treat of man in his relation with the material world—of man in his relations with his fellow-man—of man as a being capable of acquiring power over the various natural forces provided for his use, and responsible to his fellow-men and to his Creator for the proper use of the faculties with which he has been so wonderfully endowed? if the root, the stem and the branches obey the same laws, should we not find the blossoms and the fruit of the tree of science equally obedient to them, and will not the diagram opposite represent with considerable accuracy the relation of the various departments of knowledge and—having always regard to the fact that each has aided, as it has been aided by each and every other—the order of their march toward becoming perfect and exact science?

§ 3. "The distributions and partitions of knowledge," says Lord Bacon in his *Novum Organum*, "are not like several lines that meet in one angle, and touch but in a point; but are like branches of a tree that meet in a stem, which hath a dimension and quantity of entireness and continuance before it comes to discontinu-

ance and break itself into arms and boughs; therefore," as he continues, "it is good before we enter into the former distribution, to create and constitute one universal science by the name of *Philosophia Prima*, or Summary Philosophy, as the main or common way, before we come where the ways part and divide themselves."

Concerned as he was with the order and division of the sciences, and pledged as he was in the introduction to his work to furnish it, he failed to do so, "the first part of the Introduction which comprehends the division of the sciences" being, says his editor, "wanting." A study, so far as the idea of the text appears to require elucidation, rather than an attempt to supply the deficiency, is submitted in its stead.

The several *branches* of natural science are commonly spoken of, but the figure has a larger parallelism with the subject—a tree having not only branches but also roots. These latter are properly underground branches, constituting the structural support, and furnishing the vital subsistence of the tree, which grows from its roots and with them. Its stem, branches, flowers and fruits, being converted aliment supplied by and through the roots, the allusions of the figure are in good keeping with the natural history of the subject intended to be illustrated.

The central or taproot, as the reader sees, represents matter, with its essential properties of inertia, impenetrability, divisibility and attraction. The lateral ones stand on one side for mechanical and chemical forces, and on the other, for vegetable and animal ones—and from these substantive roots of being rises the stem—man, so composed as to his natural constitution. The soul, being the occult life of the structure, is incapable of representation, though manifested by its proper evidence in the flowers and fruits, the emotions and thoughts of his faculties.

We have now the stem—the man—"having dimension and quantity of entireness and continuance before it came to discontinue and break itself," branching off into his diverse activities. These branches are in functions, ramifying into all their specific differences of application. The first branch on the material side is Physics, as represented in the diagram. Its ramifications are into natural philosophy and chemistry—masses and atoms—and

the shoots from these are mechanics and chemical dynamics—the one being the action of masses, and the other that of atoms.

The main branch on the vital side of the tree, rising a little above physics, must necessarily be organology, branching first into the science of vegetable beings, phytology, then sending off the shoot, vegetable physiology; and second, into that of animal beings, zoölogy, leading to biology, or the science of life.

Following the stem in the natural order of rank and successive development, it is seen next giving off sciology, which divides itself into jurisprudence and political economy, while on the corresponding side of the main branch, psychology ramifies itself into ethics and theology—the tree finally topping out with intuition as the material branch and inspiration as the vital one. These highest and last-named are rightly the source of the other science or sciences to which Bacon alludes as standing above metaphysics, when he says that, “as for the vertical point, the summary law of nature, we know not whether man’s inquiry can attain unto it”—that is, so as to order and methodize its teachings.

In this scheme of the sciences of things there is no place for either logic or mathematics, the respective regulative sciences of mind and matter. Neither of these belongs to natural history, being both alike mere instruments to be used in the study of nature.

Historically, the top branches of the tree of knowledge, as of all other trees, are first produced, and the branches next below are soon put forth, but mature later, the instincts of religion and reason appearing in their vigor in the childhood of the race. Social science necessarily, and metaphysics spontaneously, extend themselves as early as societies take form and speculation is awakened—bringing quickly forth the flowers and fruits of music, poetry, the fine arts, logic, mathematics and those generalities of speculative truth which are the products of imagination and reflection.* The correspondence between the figure chosen and the facts to be illustrated would seem to be complete.

*Xenophon urged upon his Athenian countrymen that in default of the domestic market for food that would have resulted from proper development of the mineral treasures with which their soil abounded, agriculture had become impossible; many having been forced to abandon it, becoming usurers of brokers. See *Journal des Économistes*, Sept., 1871, p. 365. This is probably the earliest exhibit on record of the dependence of agriculture on the mining and manufacturing industries.

In time, the branches nearer to the earth, more material in their substance and more dependent upon observation, obtain development in their larger diversity of use. The sciences of substance, of natural objects, grow and ramify themselves almost indefinitely—physical philosophy and organology, in their dependencies, shooting out in every direction of observation and experiment, at first overshadowed by the speculative branches above them, but always vivified by them; while in their turn repaying this service by affording substantive strength and corrective modification as they grow into maturity.

Such is the history of science, and such the illustration of its orderly divisions, succession, and co-ordination; it represents the compound nature of man, the sources of his powers, and the order of their development.

§ 4. Seeking to obtain power over matter, man desires to obtain a knowledge of the laws instituted for its government. To become the subject of law it is required that there be a regular and uniform succession of causes and effects, the nature of which may be expressed in distinct propositions—so that when we observe the former we may be enabled to predict the latter; or when the latter are observed we may safely assume the former to have preëxisted.

In the early ages of society theories abound, and for the reason that, in default of knowledge, almost every occurrence is regarded as accidental, or is attributed to the direct interposition of mythological powers, whose qualities are so vaguely conceived as to make the idea of the events depending upon their action scarcely one remove from that of its being absolutely fortuitous and irreducible to order and rule. The Greeks of the days of Homer solicited the aid of imaginary deities, themselves moved to action by the same feelings and passions that influenced their worshipers; precisely as does now the poor African who makes his oblations of corn or oil, palm-wine or rum, to the stock or stone, the alligator, or the bundle of rags, he has chosen for his idol. With time, however, the regular succession of effects and causes comes to be understood, and at every stage of progress theory tends to pass away, yielding place to knowledge; this latter bringing with it power to direct the forces of nature to main service. At each such stage he obtains new evidence of the uni-

versality of natural laws—new proof that where exceptions appear to exist they are but appearances and will, when carefully analyzed and fully understood, but prove the rule; as does the smoke when rising in apparent opposition to the great law in virtue of which all the matter of which the earth is composed tends toward its center.*

To prove the universality of law, thereby establishing the unity of science, seemed at first to be the intention of M. Comte, from whose work preliminary to, and intended as the basis of, the one that was to be specially devoted to social science, the preceding extracts have been made. The promised work subsequently appeared, but in it, as before when treating of man and his operations, he intentionally ignored that mathematical method to which the earlier and more developed departments of science had so largely been indebted. That he should so have done would seem to have been a consequence of regarding mathematics as a science, and not as a mere instrument for the acquisition of scientific knowledge. Thus, in treating of chemistry, he tells us that "every attempt to refer chemical questions to mathematical doctrines must be considered, now and always, profoundly irrational, as being contrary to the nature of the phenomena."† What, however, are these doctrines? Are they anything beyond simple formulæ adapted to the peculiar circumstances of the case under consideration? Certainly not. The geometer tells us that every whole is equal to all its parts, and that things which are halves of the same thing are equal, axioms of universal application, and equally true in relation to all bodies, whether those treated by the chemist, the sociologist or the measurer of land, but involving no question of doctrine whatsoever.

Occasionally M. Comte speaks of mathematics as what it clearly is, an "instrument of admirable efficacy," but being an instrument it can no more be a science than can a key become a lock.

* "We ought to conceive the study of nature as destined to furnish the true rational basis of the action of man upon nature; because the knowledge of the laws of phenomena, of which the invariable result is foresight, and that alone, can conduct us in active life to modify the one by the other to our advantage. In short, SCIENCE WHENCE FORESIGHT, FORESIGHT WHENCE ACTION, such is the simple formula which expresses the general relation of Science and Art."—*Comte*.

† *Ibid.*, vol. i. p. 299.

That instrument, the mathematical method, is always applicable, whatever may be the subject of investigation. That method is analysis—the study of each separate cause tending to produce a given effect. To it we owe all the discoveries of Copernicus, Kepler, Newton and their successors; such too being the method of the chemist, who commences by ascertaining the separate force of each of his various ingredients, and ends by deducing the law of the effect. When engaged in the study of the skeleton the physiologist uses the formulæ of the physicist; but when studying the composition of the blood he resorts necessarily to those of the chemist, in which is embodied all the knowledge derived from the observation of the philosophers by whom he had been preceded. This method, however, is discarded by M. Comte in treating of social science, as will be seen by the following passage:

“There can be no scientific study of society, either in its conditions or its movements, if it is separated into portions, and its divisions are studied apart. I have already remarked upon this in regard to what is called political economy. Materials may be furnished by the observation of different departments; and such observation may be necessary for that object; but it cannot be called science. The methodical division of studies which takes place in the simple inorganic sciences is thoroughly irrational in the recent and complex science of society, and can produce no results. The day may come when some sort of subdivision may be practicable and desirable; but it is impossible for us now to anticipate what the principle of distribution may be; for the principle itself must arise from the development of the science; and that development can take place no otherwise than by our formation of the science as a whole.”

“In the organic sciences the elements are much better known to us than the whole which they constitute; so that in that case we must proceed from the simple to the compound. But the reverse method is necessary in the study of man and of society; man and society as a whole being better known to us, and more accessible subjects of study than the parts which constitute them.”*

To pursue the course thus indicated would be to go back to what M. Comte was accustomed to denominate the metaphysical stage of science. The philosopher of old would, in like manner, have said: “These masses of granite are better known to us than the parts of which they are composed, and therefore we will limit our inquiries to the questions as to how they came to have their

* *Positive Philosophy*, Martineau's Translation, vol. ii. p. 81.

existing form and occupy their present position." Without the analysis of the chemist it would have been as impossible that we should be enabled to "penetrate into the details" of the piece of stone, and thus to acquire a knowledge of the composition of the distant mountain from which it has been taken, as it would now be for us to penetrate into those of the communities that have passed away, were we not in the midst of living ones, composed of men endowed with the same gifts and animated by the same feelings and passions observed to have existed among those of ancient times; and were we not, too, possessors of the numerous facts accumulated during the many centuries that since have intervened. It is the details of life around us that we need to study, commencing by analysis and proceeding to synthesis, as does the chemist when he resolves the piece of granite into atoms, and thus acquires the secret of the composition of the mass. Having ascertained that it is composed of quartz, feldspar and mica, and having fully satisfied himself of the circumstances under which it appears in the country near to him, he feels entire confidence that wherever else it may be found, its composition and its position in the order of formation will be the same. He is constantly going from the near and the known which he can analyze and examine, to the distant and the unknown which he cannot; studying the latter by means of formulæ obtained by analysis of the former. Thus it was that by the study of the deposits of Siberia and California, the geologist was enabled to predict that gold would be found among the mountains of Australia.

(TO BE CONTINUED.)

THE PHILOSOPHY OF THE FRENCH REVOLUTION.

BY PAUL JANET.

Translated from Revue des deux Mondes, by O. H. K.

THE THEORISTS OF THE REVOLUTIONARY IDEA.

I.

THE course of the French Revolution is a continuous series of new departures. At each new phase of its history, new points of view are occupied, new theories arise, and as often as the philosophy changed, so often did a victorious course of reasons

show, as necessarily following, the most opposite consequences. Such a diversity of opinions is not at all unnatural; it is the regular result of the complication of things. Boundless sources, immensely varying fortunes, a concatenation of events which no one could have foreseen and which none could have controlled; such are the elements which this tragic and always new drama offers for the meditation of the thinker. We should not wonder at all that each one looks at this history from the point of view of his own opinions and affections, and that, refracted from so many prisms, it should appear under the most different forms. Complicated both in itself and in its history, the Revolution still remains *the* event in European history.

Our continental situation has not permitted the nation to develop so freely as America or England have; it is easily mixed up with the interests of other nations; whence springs still another source of complication. And, finally, the progress of science and of historical criticism, by their more exact and profound comparisons of our history with that of other nations, naturally correct more than one prejudice, while, perhaps, they introduce new ones.

We are not so presumptuous as to add a new opinion, or a new theory, to all that has been written, thought and professed by so many illustrious writers; we think that instead of extending the field of contention it will be better to bring it within reasonable bounds. It seems to us that, in order to judge correctly of so great a subject, it will be best to collect all the opinions expressed by competent judges; all those, at least, whether good or bad, which have weight. Perhaps these judgments, collected with sincerity, summarized with precision and criticised with justice, may serve to limit each other, and the truth, which is the mean between the two, may come out of the conflict of these contradictory statements. It is with this view that we have made this sort of historical sketch of the philosophy of the French Revolution. It can, without violence, be divided into two distinct periods: the period of contest, when we see on either side the "pro" and the "con.," the "yes" and the "no," with all the excess of passion and partisanship, and the period of criticism, of reflection, examination and doubt. Between the fanaticism of

the first period and the skepticism of the second it remains for reason to show us the right way.

Of all the countries of Europe, the one in which the principles of the French Revolution first attracted attention and provoked examination, was England, caused both by the free discussion of politics, to which she was accustomed, and by her having given us the example of a revolution like our own. In the front rank of those who from the first took our part, and never abandoned our cause, we must place the great orator of the Whig party, the celebrated adversary of Pitt, and one of his successors in the ministry—Fox, whose name should never be forgotten by the French people, so rare among our neighbors are statesmen who have loved France. Among the adversaries of the Revolution who, with an equal strength of conviction, an equal love for their country, and also, as they believed, for liberty and humanity, have, in their speeches as well as by their writings, combated and solemnly reprobated this new revolution, so different, in their eyes, from their own, we must place Burke, likewise one of the leaders of the Whig party, bound to Fox, up to that time, by the ties of closest friendship, but who broke with him in a memorable session of Parliament for no other reason than the difference of opinion caused by the events in France.

Fox wrote nothing on the French Revolution; he only developed his opinions in his speeches. But Burke was not content to hurl at it, in speaking, the most exaggerated and provoking accusations, but published a very bitter and diffuse pamphlet, which was, however, full of sharp and prophetic views, under the title: *Reflections on the Revolution in France*, in the form of a letter to a friend.* In this work we see Edmund Burke in the excess of fear lest the new principles might result in England, in a natural confusion of the revolutions which have taken place in the two countries. There were not then wanting, even in England, bold spirits who declared that the English Constitution rested, or seemed to rest, on the principle that men were trying to introduce into France, *i. e.*, the sovereignty of the people, which

*This work produced a great effect in Europe. The American, Tom Paine, refuted it in his book on *The Rights of Men*. Priestly combated it as well in his *Reflections on the Revolution*. See in reference to Burke the remarkable study in the *Revue* of the 1st of Jan. and 1st of Feb., 1853.

might open the way to wonder why they did not draw the same consequences from them.

To this philosophical and radical procedure, which characterized the French Revolution, Burke opposes the historic procedure which characterized the English Revolution. He is far from upholding, as the Jacobins did, the divine right of kings; but he argues that the change of dynasty which took place in the 17th century was only an exceptional lapse from the law of hereditary succession, a lapse which they have tried to make as small as possible. It is easy, as he says, to conciliate the sacred principle of the hereditary nature of the crown with the right to change its application, which should not be done except at the wish of the party at fault, as it was not right to decompose the political body altogether, under the pretext of creating an absolutely new rank. With the common sense which in politics characterizes the English mind, Burke advanced the idea that coördinate with the principles of "conservatism" should be that of "reform," as otherwise a society whose chief is mad or criminal would of necessity perish; but this reform should be limited to what was strictly necessary, and should depart as little as possible from the regular and traditional order. Thus, during the Revolution of 1688, James II. was declared to have abdicated, and in consequence the throne was vacant, which permitted the accession of the next heir, although no one could infer from this particular case an absolute right to "dethrone kings and set them up." By virtue of these principles, Burke denied that the people had a right to change the form of government when they pleased. The mere idea of "a new government" sufficed, in his eyes, to inspire "disgust and horror." English liberty is not an *a priori* right, it is an "inheritance." It has "its armories, its picture galleries, its inscriptions, its archives, its proofs and its titles." In one word, says Burke eloquently, "Our liberty is nobility."

It was this traditional and historic liberty, founded on monuments, and not on abstractions, that Burke would have liked to have seen established in France. He conceded that the old French Constitution had been much damaged, but portions of the walls still remained, and the foundations still stood. He tried then to show how the rights of the nobility, the organization of clergy, the assemblies, the provincial privileges, how all these in-

stitutions, more or less altered for the worse by time, could, with some improvements, serve to build up the new edifice. It will always be, without doubt, a cause for regret that the French Revolution did not terminate, as Burke desired, in a lasting compromise between the past and the future, aristocracy and democracy, the king and the people, between traditions and progress, between right and privilege. No doubt a continuous and regular advance in reform is a thousand times better than these rough outbursts which overthrow everything, and have, besides, the misfortune to be followed by contests which sap the vitality of the nation. Happy the nation whose conservatism is reforming and whose reform is conservative.

Burke and his modern disciples continually hold up to France the example of England—they talk of nothing but 1688, and seem to forget entirely that there was a year 1641, in which the English were far from showing the same spirit of wise reform without violence, which they exhibited fifty years later. Yes; undoubtedly, in 1688 the English made a prudent reform, but it was forty-eight years after the first. Does it not seem to have been a sufficiently radical revolution which decapitated Charles I., established the republic* in England and made Cromwell protector? Supposing that France, as Burke wished, ought to have imitated England, she should have fifty years in which to do it.

* M. Janet very gravely misapprehends the tendencies and the significance of the revolution of 1641. The real representatives at that time of those Jacobins, who gave character to the French Revolution, were the Levellers, whom Cromwell kept down with a strong hand. Carlyle (who has studied both revolutions) describes their secret conspiracy in the army as "a whole submarine world of Calvinistic sansculottism, Five Point Charter and the Rights of Man threatening to emerge two centuries before its time." Their Rousseau, Captain Everard, declared their "intent to restore creation to its former condition," and prophesied "that the time will suddenly be when all men shall willingly come in and give up their lands and estates and submit to community of good." To this end they wished to burn up the records in the Tower, abolish all existing offices and start afresh under a Democratic Republic of Saints. Cromwell's speeches place him on the same ground with Burke; he wished the future of the nation to be in historical continuity with its past; he was no republican, and the Commonwealth under him was no republic; he wished for a hereditary monarchy, but without the name of "kingship," which had become offensive to many who were as little bent on material innovation as himself. The execution of Charles I. could only be regarded as a Jacobinish break with the past by those who regarded the succession of a single house as essential to the historical continuity of the nation, and in that respect 1688 was as bad as 1640. There were even precedents for both in the earlier history of the nation.—ED. P. M.

Up to 1830 England had nothing to reproach us with, for we had done only what she herself did. She gave us the example of the regicide, that of the republic, that of the military government, that of a counter-revolution, and finally that of a new revolution in favor of a younger branch of the royal family. One can understand that France should be reproached to-day for not having yet known how to stop her course with a reasonable variety, but running continually into some new and unknown form; but Burke had not the right; he was in too much of a hurry in asking of France that she should stop short, at first, at that point which it took England fifty years to reach. Besides, did not Burke, pre-occupied by the model which he had before his eyes, believe too easily in the possibility of France imitating that example? Montesquieu seems to have seen better when he said: "Abolish in a monarchy the prerogatives of the aristocracy, of the clergy and of the cities, and you will soon have a republic, or, more probably, a despotism." What then did the ancient monarchy do two or three centuries ago? She destroyed all the hereditary liberties, communes, assemblies, aristocracy, states-general, clergy; all had been effaced, destroyed, leveled for the profit of the Prince. How can the ancient edifice of the French Constitution be rebuilt? Where can we find again those old charters and title papers of that traditional liberty which should be our heritage? Burke is right in saying "that no power, no institution could render them different from that which God, nature and their education and habits made them." Now, in France, just as tradition was a leveler, so royalty had begun the leveling process; democracy was in France just as natural a consequence as aristocracy in England.

It is impossible to misconceive the danger of a revolution which arises from sources too general and too abstract, for, these sources not being precisely defined, each one bounds them according to his own views, and as soon as he believes them to be violated, appeals to the right of force. So it may be right to say with Burke that the French Revolution prepared "a mine," whose explosion would overthrow all governments. This mine "is the rights of man," and he correctly remarks that all these rights are absolute and extreme in theory, whereas in practice they can never be anything "but a mean, a compromise between a good and an

evil, frequently, indeed, between two evils." The theoretic justice of these assertions cannot fail to be recognized. But while we regret that the Revolution was introduced by a metaphysical preface, it would be useless and, perhaps, dangerous to formulate these rights under an absolute rule. After all, it is probably nothing more than a question of rule and conduct, and, perhaps, in examining closely this celebrated decalogue of the rights of the man and the citizen, we would find that these rights were precisely that mean of legitimate and necessary wants to which the manners, civilization and growing interests of men have gradually led their minds, and that if there has been a sudden and frightful explosion it is because these wants have not been satisfied in time.

Further, it is necessary in this celebrated declaration to distinguish the principles of political rule from those of civil order. And to the same extent as the first have been powerless, up to this time, to give us a durable order, just so far have the second been lively and energetic, notwithstanding partial and transient mutilations. In fact, the principles of the "*Declaration of Rights*" are exactly those which have been most firm and persistent in our own revolutions. All the political institutions which have tried to establish themselves have perished, one after another, and it is still an unsolved problem whether a revolution so radical in its nature can originate and support a government; but, while the constitutions fall, the social foundations, laid by the "*Declaration of Rights*," remain as firm as ever. The charter of 1814 and the constitution of 1852 recognize explicitly the same fundamental principles. Furthermore, these principles are tending toward becoming the rules of all civilized society, and aristocratic England herself bends toward them, little by little, as well as feudal Germany.

While Burke places himself, in his criticism, at the exclusive point of view of history and tradition, the German philosopher, Fichte, then in his youth, and full of that ideologic and speculative frenzy of which the Germans have been so well cured since, sustains the philosophic view with the most fearless freshness, and with an exuberance of abstract phraseology which, at least, was not, in the eighteenth century, the fault of our philosophers. Fichte teaches us that "to judge of the lawfulness of a revolution" we must "arise to the original form of our spirit;"

that "it is from our I, not as it is moulded by experience, but from the I pure outside of all experience," that we must draw this judgment. We can thus see to what a height of abstraction it is necessary, according to the German philosopher, to raise ourselves before being fit to speak concerning the French Revolution.

In fact, Fichte makes an important distinction; there are, according to him, two things to consider in a revolution—its lawfulness and its wisdom. Its lawfulness can be judged of only by the *a priori* principles planted "in the essence of the I;" as to its wisdom, the criterion is derived from experience. You may perhaps think that the author makes here some concession to the historical school. By no means. Experience, to him, is not that of history; "what good does it do us to know how many grand monarchies there have been, or what was the date of the battle of Philippi? No! true experience is that of psychology; it is the experimental cognizances of the human soul." That is the manner, according to him, of judgment most solid and the least subject to error. "Common history has nothing to do with it."

So history, which is all in all in Burke's view, is nothing at all in that of Fichte; the one sees nothing but heritages and historic traditions; the other rejects with scorn all political and social facts. He shuts himself up in his pure ego; and when he condescends to come down to experience, it is to the abstract experience of man in general, rather than to the living and concrete experience of the historian, that he has recourse. Besides, of the two questions propounded by him, as to its lawfulness and its expediency, Fichte discussed the first, only, and that in most general terms. For him, the question whether a revolution is lawful or not, is entirely dependent upon the question whether a nation has a right to change its political form. In order to prove this aright, Fichte founds his argument upon the principle of Rousseau, *i. e.*, the idea of the "social contract," and if it should be asked: Who has seen such a contract? where are the papers? at what time and place was it entered into? Fichte answers that the "social contract" must not be understood in a historical sense, that Rousseau himself never regarded it in that light; that this contract is only an "idea," and that it is after this idea, considered as type and rule, that societies of men should act. It is, then, not in fact but in right that civil societies rest

upon a contract; and it follows manifestly from these premises that nations have the right to change this form of government, since the contracting parties can always modify the terms of the contract. Might it not happen, however, that the essential part of the contract should be of such a nature as to be eternal and irrevocable? No, for such a want of change is contrary to the destiny of humanity, and this destiny, according to Fichte, is "culture," *i. e.*, the exercise of all our faculties, in view of the principle of absolute liberty, of absolute indifference to everything which is not ourselves, of everything which is not our pure and absolute *ego*; in simpler terms, man is here to develop himself, and to subject the objects of civilization to his moral faculties. Man has, then, the right to remove one by one the obstacles which are in the way of his internal development. He has the right to modify all the political institutions, which have not for their object the advancement of his liberty; but as there is no institution which is not, more or less, an obstacle, there is none which is irresistible. Those which are bad, and go contrary to all political order, should be changed; the good, on the contrary, will change themselves. "The first are a fire of rotten straw, which should be put out; the second, a lamp which consumes itself in proportion to its light."

Fichte carries the principle of the social contract so far as to admit that every man has the right to withdraw from the nation to which he belongs; he recognizes it as one of the rights of any body of men; in one word, he acknowledges the right of secession in its extreme sense. If this right belongs to the smallest number, with still greater reason does it to a larger number, and still more to the whole nation: thus from the right of secession comes the right of revolution.

It may be believed that, by taking a point of view so rigorously abstract, all difficulties will be removed; but you do not get rid of any. No doubt a nation has always the right to make what institutions it pleases, but, in fact, a nation is never in that state of ideal nature, in which he places himself; it is always in a determinate civil and political condition; it obeys the lawful powers, and beyond these legal powers nothing is done rightfully. The question then is reduced to this: Are there any cases, and what are they, in which the people, called together by an

authority, lawful or not, and again become sovereign, have the right to tear down the old walls, and build anew the political edifice? This is the very problem raised by the French revolution. But howsoever much you believe in the dogma of popular sovereignty, it is very difficult to admit that the very day the states-general met the king had ceased to be king, the nobility to be nobility, the parliaments parliament, that all the institutions had been suspended, and that the people had re-entered the state of nature. No human society can exist without a form of law, written or unwritten, and without some civil and political order; it is subject to that order until it has replaced it, and it can not alter it without submitting to it. In pure and abstract right, the people, in their lawful assemblies, is the only sovereign; in historic and positive right, the collection of established institutions was the sole representative of law, and nothing about it could be changed without the concurrence of the lawful powers. Such is the problem, the entire difficulty of which Fichte does not seem to have realized.

In our opinion, there is no absolute and *a priori* criterion with reference to the lawfulness of a revolution. It is a question of estimation, and the judgment should be, if I may so express myself, composed of the historic and of the philosophic rights of legality as well as justice. Let us apply this principle to the French Revolution. Without asking whether the people have the right to change the form of government, we will say that a nation should not be destroyed by the very institutions which are charged with its preservation. Now in 1789 the French kingdom had not only become powerless, but had declared itself so by the convocation of the states-general. After having tried all measures, and seeing that it was absolutely impossible to govern any longer, the government called the nation together and thus gave up its absolute power; in calling upon the nation to share its responsibility, it called upon it to share the powers, for if there is no power without responsibility, as true is it that there is no responsibility without power. The nation, in its turn, or at least the most numerous portion of the people, the productive and laboring class, when called upon to save the finances of the State, has the right to take securities for the future, and by this means deliver themselves from the obstacles which weigh them down.

Consequently the abolition of the feudal system and the absolute monarchy were implicitly contained and accepted beforehand in the convocation of the states-general. These two points are the two essential matters in the French Revolution, which, thus, is in principle not only just, but lawful. Those who to-day defend the revolution are by no means compelled to accept all its phases and accidents. The essential part of the revolution was the abolition of the *ancien regime*, which abdicated of its own accord, by reason of want of power. The revolution then, was just in itself, however wrong and culpable it may have been in its developments.

History and philosophy, however, are not the only points whence to judge human events; higher than either is religion. So long as we are only considering the ordinary facts of the political life of nations, it is not only not usual, but injudicious, to bring God in too prominently; it seems like lowering Him to make Him play a *role* alongside of the little passions and common interests of mankind.* But when events assume vast proportions, when, by their unexpected greatness, they cause astonishment and awe, the thinker and the believer can hardly escape the temptation of seeing in these great crises the living presence and terrible hand of Providence. Bishop Salvianus tells us that at the time of the great invasions the astonished people asked with fright: "Why have the Romans, why have the Christians been overcome by the barbarians?" Joseph de Maistre likewise tells us that the vanquished in the revolution showed the same terror, and could not understand anything of what was going on before them. "*I do not understand at all*" is the common saying of the day, "How is it that the most wicked men in the world triumph over the world?" The invasion, like the revolution, were a divine

*An extremely French opinion; but those who have studied history in English or German schools will hardly accede to it. We cannot quite look on Isaiah as one who belittled God by mixing up his name with the petty politics of Judea and Israel. Goethe well says that the Bible was written to show us the greatness of little things. Lessing, in his *Education of the Race*, presents to us the course of history as a divine education of men. The same idea has been far more amply and ably presented in the writings of that greatest of living theologians, metaphysicians and political philosophers—Prof. F. D. Maurice, especially in his *Prophets and Kings of the Old Testament*. Mr. Mulford, who has studied Maurice in connection with many other thinkers, embodies the same view in his work—*The Nation*.—ED. P. M.

chastisement. "We are visited," said Salvianus, "by a judgment of God, and it is for our loss that this race has been sent against us, this race which marches from district to district, and from city to city, destroying and carrying off everything in its path; it is the hand of Providence which sent them to Spain, to chastise the Spaniards for their omissions, and into Africa to lay waste everything. They themselves avow that what they do is not their own work (*suum non esse quod facerint*), and that they were urged on by a divine decree." A similar sentiment of fear and severe mysticism must have affected men's spirits at the sight of the prodigious changes of the revolution, from that new invasion of barbarians, as Mad. de Staël calls it, an invasion as deadly and destructive as those that Salvianus saw.

This thought is developed by two very different thinkers, but bound together by some common traits, and who have given analogous theories of the French Revolution. Saint-Martin, the philosopher, the hardy and candid mystic, and Joseph de Maistre, the author of *The Pope*, the eloquent and intrepid believer in the intimate government of God; he first, somewhat heretical, but more preoccupied with heaven than earth; the second, more orthodox, but much more attentive to the affairs of earth than to those of heaven; the one rather a friend, the other a declared foe to the revolution. Both took the religious view of it; but the first believed that it was about to realize the mystic ideal which was in his mind, and that it would result in a new form of religion; the other thought, on the contrary, that it would terminate by a restoration of all which it had destroyed.

It is in a letter to a friend that Saint-Martin expressed his views on the Revolution and opened the way to M. de Maistre. Saint-Martin was one of the first to recognize the Revolution not only as a great event in the history of France, but in that of mankind. "It is," said he, "the Revolution of the human race." In it he saw "The footprint of Providence at every step." What, then, is the meaning of this providential event? It is a great expiation, "a miniature of the last judgment." It is a panorama which represents everything which, in that last crisis, will be realized instantaneously. France has been visited first, and most severely, because she was most wrong; "but the other nations in their turn will not be more spared than she." Thus we see that

the Revolution was for Saint-Martin, as well as for Joseph de Maistre, an expiation; but their thoughts are always different. For the first, this great expiation is much less a punishment for the impious philosophy of the 18th century* than for the Christian idolatry represented by the Catholic priesthood. He remarks that the priesthood suffered more from the Revolution than the nobility, which, though in his eyes "a monstrous excrescence," had not much to lose, having been abased long before by the king and his ministers. The priests on the contrary were still "in the enjoyment of their fictitious rights and temporal usurpations;" and must be regarded "as most wrong and as the sole authors of all the crimes committed by the other orders." "It is the clergy," Saint-Martin further says, which is "the indirect cause of the crimes of the kings," and which, while unceasingly speaking of God, have done everything to advance their own power. It has covered the earth with temples "whose principal idol it has been itself;" it has "turned prayer out of the way instead of giving it free course;" "it has transformed all the beneficent rights which it has received into a ruinous waste and a despotic rule over the consciences of men;" and made the sacred books "a list of exactions." In one word, Saint-Martin looked upon the priesthood as "the monopolists of the food of the soul." And, according to him, it was they that Providence had particularly in view in the course of the Revolution. Of what nature, then, for Saint-Martin, is the object of this great crisis? It is essentially religious. "Providence," says he, "is much more concerned with facts than with words. The wars of the 16th century, which are called religious, were political; whereas, the Revolution, which seemed only political, is at bottom a religious war; it was the crisis of the struggle between the expiring human powers and a new, natural and living power." It might be said of this spectacle, as Pharaoh's magicians did at the sight of Moses' wonders: "Here is the hand of God." The final aim of all these wonders is to conduct the nations to the height of the divine, spiritual and natural theocracy which should be their form of government. So this great crisis is only a sign of an ultimate restoration, and "a positive plan of renovation."

*He considers Jean Jacques Rousseau as "an apostle," as "a prophet."

Saint-Martin was not, after all, inimical to the revolution, although he placed the political and social aims which it pursued in a very inferior rank. He shared its passions against the *ancien regime*, against royalty, nobility and priesthood, and if he saw in it a punishment, it was a chastisement for the past. Joseph de Maistre, on the other hand, is the consistent irreconcilable adversary of the Revolution; in his sight, it is "radically" bad; it is "an event unique in history;" but why? because it is "satanic." But, bad as it was, and even because it was an absolute evil, we must guard ourselves from believing that it was only an accident from some superficial cause. It is "a great epoch," an event truly providential and "decreed," and a "miracle" in the true meaning of the word; its fatality is its most striking characteristic. It led men, more than they regulated it, as Salvianus says: *barbari compelluntur inviti*.

We see that de Maistre speaks of the revolution and its fatal nature exactly as the Jacobin fanatics did somewhat later; for him as for them, France was performing a mission in the world, and the Revolution formed part of this mission, only, according to the Jacobins, her mission was to establish the rules of reason and liberty; but in de Maistre's view it was that she should be the most Christian nation. Now France, having misconceived and given up its mission in the eighteenth century, having laid violent hands on the sacred tree, which it was charged to protect and tend, deserved to be punished in proportion to its offense; and as the crime was very great, the chastisement should be equally so. Why then should the innocent be punished along with the guilty? There were no innocent people; the entire nation was in fault for the great outrage which they committed, for the outrage against their sovereign, for the death of Louis XVI. "There have been nations condemned to be blotted out entirely." The French people seem to have understood it, so passively did each take his own punishment. "Never did sanguinary despot play with the lives of men with so much insolence, and never has a people gone so passively to the butcher's knife. Neither fire nor sword, neither cold nor hunger, nor sufferings of every kind, *nothing made them dissatisfied with their punishment.*"

Saint-Martin and de Maistre have shown penetration and sagacity in recognizing the French Revolution as an important

event in the history of the world. It was, without doubt, providential, and announced a new era in the world. If we consider, besides, the bloody fanaticism of the revolutionary spirit, we can say that it is also a satanic event. Satanic and providential; such is the double aspect presented by it. Further, it was an expiation—the expiation of two centuries of despotism and license. But if these two writers have well described it as to its past and present, they have both been wrong in prophesying the future. Perhaps, however, their prophesies may not be so far wrong after a time. Who knows whether the church, when the struggle now so fiercely raging shall have been ended or moderated, may not find in modern liberty a power such as she does not suspect, and which will restore to her an empire more solid than that which she lost? Who knows whether, outside of the church, all the confused and divergent elements of religious renovation, which, at least, are evidence of a real and deep-seated need, will not organize themselves around a common center, and the old Christian form, more or less transformed be the common focus. In criticising prophets, let us beware of prophesying in our turn; but we can say now that the European nations, if they do not wish to perish like the Roman empire, must find some religion to draw men's souls away from the two evils which divide them to-day: a criminal atheism and an effete theocracy.

But the theological idea, though predominant in the book of Joseph de Maistre, is not the only one. He, like Burke, maintains the principles of the historic school; like him, but with greater precision, he maintains that the institutions of a country are handed down, and not the artificial product of the human will, from which spring the frequently cited aphorisms: "No form of government is the result of deliberation; the rights of the people are not written; the more there is written, the weaker is the institution; no nation can give itself liberty if it has it not." For him the fundamental error of the French Revolution was, that it was *a priori*, metaphysical, resulting from vague definitions and abstract formulas, and that instead of seeking the rights of the French, and the form of government which was proper for them, it began by proclaiming the "rights of Man," as if there was any where a living being called Man; as he himself says: "There is no such thing as Man in the world. I have

seen Frenchmen, Italians, Russians, etc., but have never met Man in my life."

This injurious and plausible objection is one which has had the greatest success; it has frequently been, and still often is, brought forward. Is it not possible, however, that there may be in some part of the world a nation whose proper occupation is the transformation of social facts into general ideas; a nation, which prefers the abstract to the concrete, the universal to the particular, a nation which, endowed to the highest degree with the instinct of sociability, shall rather seek in men their points of resemblance than their points of difference; a nation more occupied with what ought to be than what has been; of their own will putting aside tradition and obeying ideal justice; a nation philosophical, not like the Germans, who limit philosophy to metaphysics, nor like the English, who see in it nothing but empiricism; but whose philosophy should be justice and equity? Now, if such a nation became enlightened; if abuses continued to increase at the same time that their reason was forming; if at any time there arose a conflict between the public mind and superannuated institutions, is it not true, that in claiming general and universal rights, in proclaiming "the rights of Man," such a nation would be exactly carrying out its own nature, its own traditions? Let us not be afraid, notwithstanding the criticisms of the patrician theocrat and his modern disciples, of applauding the Revolution, for having tried to establish the general rights of Man instead of historic privileges. Why should not man seek to approach from day to day nearer the essence of Man? This fine title Man has nothing whatever unworthy, and besides it has antiquity, both profane and sacred; *Homo res sacra homini*, says Seneca; *Faciamus hominem ad imaginem nostram*, says the Septuagist. Do you suppose that when God created the first man our theocrat would have said that God did not recognize Man, but only Englishmen, Frenchmen and Russians? Was, then, Adam French, or Russian, or what? Man and nothing more.

It is the bent of the Christian religion, as well as that of philosophy, to regard men by a common type. Thus the Revolution, then, was not wrong in proclaiming "the rights of Man;" but,

like the Catholicism of the Middle Ages, in enforcing them by fire and sword.

While the aristocratic and theocratic schools rejected and denounced the Revolution, the constitutional school, at the same time that it blamed its excesses, timidly took its part, and, soon after, the young liberal school of the restoration, more daring, took up its *défense* boldly. As early as 1792 Mounier, one of the first who despaired, and as early as the days of October, abandoned the constituent assembly, where, he believed, there was no more good to be done, in the very book in which he demanded a counter-revolution, made a most severe criticism of the *ancien régime*, and declared its reëstablishment impossible. He justified the first acts of the states-general, in which he participated, viz.: the abolishing of the higher ranks of society and the oath of the *Jeu de Paume*, and did not consider the Revolution illegitimate until it passed those points; an ordinary frame of mind in times of revolution, when each one takes his own opinion as the absolute criterion of right and wrong.

Of the same shade of opinion, but more openly and with a somewhat greater degree of boldness, is Mme. de Staël, whose fine book, *Considérations sur la Révolution Française*, is well known. Unfortunately for us, it consists more of memoirs of the revolutionists, and chiefly of M. Necker, than of theoretic and general discussion, and we find expressed correct and accurate views of particular events, rather than a judgment of the whole. It contains, nevertheless, two important subjects of thought. The first is frequently cited, "that in France liberty is ancient and despotism modern." The second is, that before 1789 France had no political constitution, and that it is the right of a nation to have a constitution.

By the first of these thoughts, Mme. de Staël armed herself for the defense of the Revolution against the objections directed against her. It has been one of the reproaches against the French Revolution that it endeavored to make an entirely new order of things by founding liberty in a land profoundly monarchical; and they repeat what de Maistre says, that no people can give themselves liberty, unless they had it before; but Mme. de Staël on this point agreeing with Burke (how frequently it happens that adversaries use the same train of thoughts), answers that, if France

had not liberty in 1789, she had it formerly; she showed, by reference to Retz, Fenelon and Montesquieu, that if there was any usurpation, it was on the side of the monarchy, which gradually made itself absolute, without having been so formerly; and thus the liberty claimed in 1789 was not only of natural but of historic right. Doubtless the aristocratic, as well as the liberal school, could use the same course of argument in reference to a quasi feudal restoration; but this restoration could not take place without a revolution.

Mme. de Staël found no greater difficulty in showing that France in 1789 had no constitution, if, indeed, she had ever had one; for, except the principle of an hereditary monarchy and the salic law, it would be difficult to find what are called the fundamental laws of the ancient monarchy. "However," said Mme. de Staël, "it is the right of a people to have a constitution," and this right was recognized even by the supporters of traditional monarchy.* The revolution, then, was legitimate, in principle at least. In fact, this pretended right of every nation to have a constitution may now appear somewhat abstract and utopian, for we have become as skeptical in that matter as they were confident and candid in 1789; and it would be misunderstanding the question, and opposing one prejudice to another to bring up against Mme. de Staël our active skepticism in reference to those "paper rags" which are called written constitutions. It is very easily maintained, and is our opinion, that the best constitutions are those which are built up from day to day by custom, practice and experience, and not by abstract combinations; only, in order that this practical growth toward perfection should be possible, it is evidently necessary that there should be preëxistent institutions, which may be modified and may develop with the passage of time, for if there be none, how can they grow? Those who ridicule our ten or twelve constitutions are right, so far as the theories of each of them go; but they do not notice that from all those constitutions practice has derived a certain number of

*M. de Monthion, Chancellor of the Courte d'Artois, in a paper published in 1796, *Rapport à sa majesté Louis XVIII.*, commenced by declaring that if according to Mme. de Staël, there was no constitution in France, the revolution was justified, for every nation had a right to have a political constitution; but he tried to prove, against M. Calonne, that France had a constitution, which Mme. de Staël has refuted very thoroughly.

fixed and common principles, *e. g.*, the right to vote taxes, the principle of representation, more or less limited, the distribution of the powers of the State, the right of municipal and departmental representation, etc. Doubtless the application of these principles has been at certain epochs more or less fictitious; but this has been frequently the case in England, and yet we look up to and envy the English traditions. We must then believe that, notwithstanding so many revolutions, there have arisen in France since 1789 some germs of political tradition; but that in 1789 these germs did not exist, and that the result was to give them birth or new life, a thing impossible without a revolution.

(TO BE CONTINUED.)

APPRENTICESHIP — AND A BOY'S PROSPECT OF A LIVELIHOOD.*

AN apprentice, in common parlance, is a servant bound to work at a particular trade for a term of years, receiving payment partly in money, board, or clothing, and partly in instruction in the trade; his employer being also bound to provide these during the term of service. But the word means "a learner," simply, coming to us through the French *apprenti* from the Latin, and has its equivalent in the German "*Lehrbursch*." As we shall see, it was long applied to students in all branches of knowledge. I shall use it with reference to learners of the manual arts, who, during the greater part of the time of which I shall speak, have been *bound* or *indentured* apprentices. I propose to trace the history of apprenticeship, to state its present condition, and the natural inferences from these as to its future.

Naturally, we should not look for the learners of arts but in those places or ages in which population has reached considerable density, and a demand exists for skilled labor. But when we turn to the civilized nations of antiquity, with whom these conditions are found, we discover nothing corresponding to the modern system of apprenticeship. There is no Greek or Latin word corresponding in meaning to that first given above of the word

* Read before the Philadelphia Branch of the American Social Science Association, at its meeting in March, by James S. Whitney.

"apprentice." The Roman law is silent with regard to those reciprocal duties of master and apprentice, which make so large a part of modern codes. The prevalence of slavery, and the division of the people into fixed social classes, account for this. The instinctive love of freedom provokes a scorn of all that is associated with its loss, and where the laborer is generally a slave it is not natural that children of free parents should enter into anything like a contract of servitude. I am not sure that modern society has yet altogether outgrown this feeling as to labor, originating in the slave-holding era of nearly all nations. There was besides no evident economic advantage in free labor. The hunter can provide game with less capital than the stock-raiser can furnish meat; and a slave, a perpetual minor, could be captured or bought, with a fair knowledge of an art, at less expense than a free youth could be maintained and taught. They whom the fortunes of war made slaves abroad had already, at home, following usually the trades of their fathers, qualified themselves for their future positions. Labor and obedience become hereditary wherever idleness and power become so; and if it be impossible for a lower class to pass into a higher, its members will naturally occupy among themselves similar relations, in successive generations.

It is therefore not until slavery and serfdom begin to disappear that apprenticeship arises in Europe. The hours of day number from midnight; and the shadows of the ancient order reach down through the twilight period of the modern era, to the times of Charlemagne. With the new growth of the arts, the Guilds of Crafts appear; not probably a revival of the Greek societies, or the Roman college of workmen, but, like the guilds for religious and other purposes, independent offshoots from the same root, the tendency to association for the common welfare, found in all the European races. The history of the guilds, interesting as it is in itself and in its relation to the history of social progress, is beyond our province to-night, further than in its connection with our subject. Of their *general* and *common* features, a very good idea will be given by the following example: the "Agreement of the Guilds of Exeter" (England), dating perhaps from a century before the Norman conquest. (*From Smith's History of English Guilds.*)

"This assembly was collected in Exeter, for the love of God, and for our soul's need, both in regard to our health of life here, and the after days which we desire for ourselves, by God's doom. Now we have agreed that our meeting shall be thrice in the twelve months; once at St. Michael's mass, the second time at St. Mary's mass, after mid-winter, and the third time at Allhallow mass-day after Easter. And let each gild-brother have two sesters of malt, and each young man one sester, and a sceat of honey. And let the mass-priest at each of our meetings sing two masses; one for living friends, the other for the departed; and each brother of common condition two psalters of psalms; one for the living and one for the dead. And at the death of a brother, each man six masses, or six psalters of psalms; and at a death each man five pence. And at a house burning each man one penny. And if any one neglect the day, for the first time three masses, for the second five, and at the third time let him have no favor, unless his neglect arose from sickness or his lord's need. And if any one neglect his contribution at the proper day, let him pay two-fold. And if any one of this brotherhood misgreet another, let him make boot (amends) with thirty pence. Now we pray, for the love of God, that every man hold this meeting rightly, as we rightly have agreed upon it. God help us thereunto."

The guilds formed for the protection of the inhabitants of towns from their feudal lords, in England from the seventh, in Germany from the ninth, and in France from the tenth century, including gradually all the citizens, and having obtained the royal sanction to ordinances framed for their own government, passed unnoticed into civic corporations.* In the eleventh and twelfth centuries they began to divide into their constituent elements. The trades of merchant and manufacturer, originally carried on by the same person, had become separated, the richer workman growing into the dealer; and the merchants now excluded from

*The connection of the town government with the guild throughout Europe is an inviting study. At least two writers, Thierry, in France, and Kemble, in England, have attributed to the latter the *origin* of towns in Northern France and in England. See Hallam, "State of Europe," I, p. 349; and Brentano p. 105 (in Smith's "History of English Guilds"), as to the same connection in Germany. Dr. Brentano's Essay has been my chief authority for the history of guild's.

the guild the men "with dirty hands" or "blue nails," or who "hawked their wares in the street" (as the Danish, Belgian and German statutes declare), in short, the craftsmen and small dealers. With the government of the towns in their hands, the guilds, now become largely mercantile associations, were able to oppress these classes quite as notably as they defended the liberties of the town against the nobles. The result, of course, was the formation of guilds among the craftsmen, and struggles for political power between the old and new organizations, sometimes ending in a compromise, but generally in the supremacy of the workingmen, as the more numerous party, in the manufacturing towns at least.

Thus in Italy "the principal cities, and especially Milan, reached, before the middle of the 12th century, a degree of population very far beyond that of the capitals of the great kingdoms. Within their strong walls and deep trenches, and in the midst of their well-peopled streets, the industrious dwelt secure from the license of armed pillagers and the oppression of feudal tyrants. Artisans, whom the military land-holders contemned, acquired and deserved the right of bearing arms for their own and the public defense. Their occupations became liberal, because they were the foundation of their political franchises; the citizens were classed in companies according to their respective crafts, each of which had its tribune or standard-bearer (*gonfalonier*), at whose command, when any tumult arose, or enemy threatened, they united in arms to muster in the market-place." "The basis of the Florentine polity was a division of the citizens exercising commerce into their several *companies* or *arts*. These were at first twelve, seven called the greater arts, and five lesser; but the latter were gradually increased to fourteen. The seven greater arts were those of lawyers and notaries, of dealers in foreign cloth . . . of bankers or money changers, of woollen drapers, of physicians and druggists, of dealers in silk, and of furriers. The inferior arts were those of retailers of cloth, butchers, smiths, shoemakers and builders. This division, so far at least as regarded the greater arts, was as old as the beginning of the thirteenth century. But it was fully established, and rendered essential to the constitution in 1266. By the provisions made in that year, each of the seven greater arts have a council of its own, a chief magistrate or con-

sul who administered justice in civil causes to all members of his company, and a banneret (gonfalonier) or military officer, to whose standard they repaired, when any attempt was made to disturb the peace of the city." (Hallam, *State of Europe*, etc., vol. i, pp. 368, 419.)

In Germany, the low countries, and England, the guilds of the weavers, the first in time and in importance, were already strong in the eleventh and twelfth centuries. Craft-guilds arose generally throughout Europe from the beginning of the eleventh to the middle of the thirteenth century. By the fourteenth and fifteenth, subject of course to variation in different places and circumstances, they had almost everywhere, where they existed, obtained the control of the government of the towns, and their trade regulations had become municipal law. This result was not reached on the continent without bloody contests with the older or mercantile companies, and with the nobles or churchmen claiming jurisdiction in the cities. In England, as usual, the revolution was a more peaceful one. The kings usually sided with the rising power to check that of the nobility, receiving certain taxes in return for their aid. In fact, kings and nobles sometimes became honorary members of a guild.

The chief special function of a craft-guild was to regulate the manufacture of the articles produced by the craft. Their "laws of trade" were such in spirit and form as the following: All who carried on a trade in any place must belong to the guild of that trade. The wardens had the right "to examine all manufacturers, and to search for unlawful tools and products." "No member was allowed to possess tools, 'unless the same were testified to be good and honest,' and the statutes contained directions and prohibitions, entering into the most minute details, with reference to the method of working." "The punishments consisted in the payment of fines, or, in earlier times, of certain quantities of wax 'for the lights used in worship,' or of beer or wine to be drunk at their feasts." To enforce payment of dues or fines, the tools of delinquent members were sometimes taken away. "No one was admitted to any trade, or tolerated in it, whose moral conduct and honor were not stainless; no one, also, who had not proved himself a proper workman, and, therefore, *no one who had not served a regular apprenticeship.*"

It is at this point that this history connects itself with our subject. "The duration of this apprenticeship differed in different trades. In England it generally lasted seven years; in France, from three to four—sometimes six; in Germany, from two to four years. The admission of an apprentice was an act of special solemnity, corresponding to the important legal consequences it involved. As it was the beginning of a kind of novitiate to citizenship, it generally took place in the town hall, in the presence of the town authorities (in London, 'as late as 1869,' it is performed in the guild hall by the chamberlain of the city), or in solemn meeting of the craft-guild. On this occasion the apprentice was specially instructed in his duties, both as to his moral conduct and the trade. At last, a record of the act, the indenture, was drawn up, which also contained the special conditions under which the apprentice was placed with his master. By this admission the apprentice became a member of the family of his master, who instructed him in his trade, and who, like a father, had to watch over his morals, as well as his work, during his apprenticeship. At the expiration of his apprenticeship the lad (then a man) was received into the guild again with special forms and solemnities, *and became thereby a citizen of the town.* On both occasions a fee had to be paid.*

The number of servants (meaning helpers as well as trained workmen), and of apprentices, allowed each member, was often limited by the guild laws. Thus by the ordinances of the guild of the tailors of Exeter, which had been long founded in 1466; "Also hyt ys ordeyned, by the Master and Wardens and all the hole crafte, that fro henseforthe no man of the said crafte shall hold but iij [3] servantes and oo [1] pryntes at the most, w^towte lesanse of the Master and Wardensse for the tyme beyng, apon payne of xlti s. [40 shillings], and he that prayeth for hym that dothe ayenste this ordynance schal forfeit xxti s. (20 shillings)."
As another specimen of these rules: "Also it ys ordeyned by the Master and Werdons and the craft forsayd, that every prentes of the sayd craft that is inrolled and trewly servethe his cownand (covenant), shall pay a spone of selver, wayyng a nonsse, *and the*

* Breutano, p. 129, etc. The title of master, as applied to a citizen (our *mister*), may have arisen from this connection of mastership in art with citizenship.

fassion, and shall elde a brekefast to the forsayde M. and Wardons, afore the day that he be abull to be made fre-man of the cite forsayd." (History of English Gilds.)

It was with such features that apprenticeship about the 14th century arose in Europe. The system formed in advance of governmental legislation, a natural outgrowth of the social state, was exactly suited to the condition of the times. There was, with the exception of the Belgian clothiers, no large "working class" in the modern sense, and no capitalist employers. The apprentice was often the only helper of his master, and when free, soon took his apprentice and carried on his craft for himself. Of course it was easier to find apprentices than workmen. But it was a system that made good workmen and good citizens. It is to its existence that we owe such tales, homespun as they seem, as Hogarth's "Industrious and Idle Apprentice" illustrates such stories, "true or well found," as of the exploits of the "Prentes Boys of London," who had their trainbands in the civil wars, and sent successful memorials to Parliament. As the business of a master increased, "servants" or workmen who had not served an apprenticeship were employed, but it was forbidden to "teach them the craft as one would his apprentice." Many of the latter class were of distinguished parentage, and many, who were not, gained it for their children, by honorably reaching and filling high public office. The name of "apprentice" was an honorable one. Benchers in the Inns of Court (in England), now called Barristers, were styled, until near the close of the 16th century, "Apprentices of the Law." The incorporated trades, or guilds, were called "universities." "The university of smiths, or of tailors," etc., are expressions which we commonly meet with in the old charters of ancient towns. When those which are now called peculiarly 'universities' were first established, the term of years "which it was necessary to study in order to obtain the degree of master of arts, appears evidently to have been copied from the term of apprenticeship in common trades, of which the incorporations were much more ancient. As to have wrought seven years under a master properly qualified was necessary to entitle any person to become a master and to have himself apprentices in a trade, so to have studied seven years under a master properly qualified was necessary to entitle him to become a master, *i. e.*, teacher or doctor,

(synonymous words) in the liberal arts, and to have scholars or apprentices (words also synonymous), under him." (Encycl. Britt).

But the same process of elevation—of the lower social elements to a higher level—which had originated the craft-guilds, wrought their destruction also when they had performed their work. Milman (*History of Latin Christianity*) points out "the hereditary tendency" under the feudal system, "of everything, from the throne to the meanest trade. The son followed the trade, and succeeded to the tools, the skill of his parent." It was natural that guild members should extend special privileges to their sons, as in France, where a son, living in his father's house till seventeen years old, was considered to have served an apprenticeship to his trade. Such practices, with the accumulation of wealth in successive generations, gradually made the guilds close corporations of capitalists. The workingmen employed, as a result of this, in large numbers, by an individual or company, began to form a distinct class. These men, not able to employ capital or labor, excluded from and oppressed by the guilds, as *all* craftsmen had formerly been by the merchants, made, in self-defense, associations among themselves, the direct ancestors of the modern trades-unions. Here we have the beginning of the present factitious antagonism of capital and labor. From the close of the 14th century we find throughout Europe statutes to protect the workmen from the corporations. Fronde (*History of England*) tells us that, in 1531, "the craft wardens of the various fellowships, 'out of sinister mind and purpose,' were levying excessive fees on the admission of apprentices, and when Parliament interfered to bring them to order, they 'compassed and practiced by cantill and subtle means, to delude the good and wholesome statutes passed for remedy.' " In the reign of Queen Mary of England it was enacted, on the ground that "the rich clothiers do oppress the weavers" (by the possession of greater facilities) "that no clothier shall keep more than two looms, nor more than two apprentices, etc." It will be seen that while the employer in one view of his interest wished to restrict the number of learners of his trade, in another he was glad to avail himself of the cheap labor they supplied. But all legislation, on either side, became a dead letter before the power of capital wielded by in-

dividuals and companies outside of either party, and assisted by new mechanical and chemical appliances; and while the guilds linger in England in the vague form of "Liveried Companies," maintaining their existence by an annual dinner, in France they perished, with all that was oppressive, in the first Revolution, and in Germany have been gradually legislated out of being.

With their decay began the decay of apprenticeship. The concentration of large numbers of workmen in one establishment made it impossible for the employer to oversee, as formerly, the entire life of the apprentice. The growth of democratic principles weakened the habit of subordination and the principle of reverence; the quickened social and mercantile life threw before all classes greater opportunities of sudden wealth; the *Ars longa, vita brevis* of older times, which has been the foundation of much good work, was practically rendered, "Life is short, and to learn well an art takes too long;" and so the old apprenticeship began to die with the guilds of which it was the flower and fruit. But the ripened seed has remained, and from its present decay we hope to show that there may arise a new and more vigorous plant.

So far as apprenticeship exists, it retains the features due to the origin we have described. The laws of the State, or the present customs respecting it, are borrowed from or founded on the earlier ones framed by the guilds. By the "statute of apprenticeship" (1563) no person was allowed to carry on any "trade, craft, or mystery" then used in England, "unless he had previously served to it an apprenticeship of seven years at least,"* which had long been a by-law of many corporations. It was also provided that only those youths might be taken whose parents possessed a certain fortune. Whoever had three apprentices must keep one journeyman, and for every additional apprentice, another jour-

*Under this law the English Courts have ruled "that a coachmaker can neither himself make, nor employ journeymen to make his coach wheels, but must buy them of a master wheelwright; this latter trade having been exercised in England before the 5th of Elizabeth (1563). But a wheelwright, though he has not served an apprenticeship to a coachmaker, may either himself make or employ a journeyman to make coaches, the trade of a coachmaker not being within the statute, because not exercised in England at the time it was made." (Encycl. Britt.) The absurdities to which such laws lead are well illustrated by this extract.

neyman. (By other laws, the number of apprentices in certain trades, was restricted absolutely, without regard to the number of journeymen.) Fees, varying from one pound to fifty pounds were required at the signing of indentures, and were taxed by the government. Overseers of the poor, with the consent of two justices, could bind the children of those unable to pay the fees, and tradesmen, husbandmen and gentlemen were obliged to take them. The prohibition as to carrying on trade without having been an apprentice, and some of the other features of this law, were repealed in 1814, at the petition of employees, after having long been evaded practically, and been the occasion of many disputes. Apprenticeship is now entered into in Great Britain as here, as a voluntary contract, subject to laws similar to ours. In Scotland there is no law regulating the term of service; three years is a common term, and both there and in Ireland apprenticeship has never been much restricted by law. In Germany the apprentice serves from three to five years, paying a larger fee for a shorter term. In case of a three year's service, at least among machinists, he pays his own board. In all cases he furnishes his own bed, which becomes his master's property at the expiration of the time. Before beginning business for themselves, the rule has prevailed, since the sixteenth century, that freed apprentices shall travel for three years, working at their trade in different cities, under the general name of *Gesellen*. In France, similar customs prevail; the time of service is from three to eight years, and of *compagnonage* (answering to *gesellschaft* or *fellowship*) five years. Before being permitted to carry on his craft as a master, the workman, after the fifteenth century, was obliged to execute and exhibit for the approval of the Master and Wardens a "*chef d'œuvre*," or master-work. This rule became obsolete in Germany, and I believe in France, about twenty-five years ago. In both countries both law and custom are gradually relaxing to the looseness of ours. Indentures are not required by law in France, Italy or Switzerland. In Italy, the practice is similar to the English, and both there and in Switzerland apprenticeship is a voluntary matter throughout. In the United States, until twenty or thirty years ago, up to which time apprenticeship was more common than now, the boy received, during his whole term of service (from five to seven years) besides his board and cloth-

ing, and a suit of clothes at the end, as in Europe, twenty-five or thirty dollars yearly. But since the time referred to in this country, apprentices receive wages in lieu of and equal to board, for the first year, advancing by about fifty cents or a dollar per week, in successive years. One of the last legislative acts in this State on this subject shows how loose the practice had become in 1865, when it was enacted that no apprenticeship should be void on account of the want of indentures, if a contract could be proved otherwise.

Our review has brought us to our own time and country. It has shown the history of the system by which the artisans have been formed who have accomplished all that civilization displays of material achievement in the Christian era. But if it be now falling into disuse, is it because there is no more need of such men, or because they are furnished by some other agency? A moment's consideration of the mechanical work which this generation is undertaking will compel us to admit that its performance requires at least as highly skilled labor as that of our ancestors. There is, no doubt, place for such men. "But do they come when we call?" Is there not a general complaint of the want of thoroughly well skilled labor? The high price of many articles made in this country, as compared with those of foreign manufacture, is often said to be due to the scarcity of labor. What do we mean by this? Step with me into any one of our large factories, on any morning, in almost any season, and wait an hour in the office. It will be unusual if in that time there do not enter at intervals three or four sturdy men, asking, as they who ask favors, "Is there any chance for a man to get a job of work here?" "What is your trade?" "I've no trade—I'm looking for laboring work." "No,—we're full to-day." There is another class of applicants, who also have no trade, so to speak; men bred to the labor of the overcrowded counting-house and forced out at the slightest mercantile panic, to ask for anything they can do in the workshop. And we talk of the scarcity of labor! It is the scarcity of men *trained to do well what is wanted*, that we mean. Ah, these men that can only help, or that can do a little of anything, are very often burdens, instead of help to the community. Those men who walk away so dejected or so indifferent—thinking, perhaps, how much longer they can put off the landlord, or get credit at the

store, or hardened into carelessness as to either, are as much *men*, and as naturally capable of *work* as the mechanic whom the foreman *sent for* that morning. So have we seen armies of thousands, but with "plentiful lack" of soldiers. Suppose the proportions of the two classes of workmen were more equal, would there not be an equalization of wages, and a more frequent substitution of machinery for simple animal force, that would lessen the cost of production, and feed and clothe a far greater number than now?

The simple fact, then, of the existence of a large mass of unskilled labor, while skilled labor almost commands its price, shows that there are material and room for a large increase of the latter. But by what agency is this increase to be made—nay, by what agency is the present number of skilled craftsmen to be kept up? There is none but the system of apprenticeship, falling more and more into neglect though it be.

I have not been able to obtain the number of learners of the different trades in this city, which, as a large manufacturing one, will illustrate well the subject, but the following figures will throw some light on this inquiry:

The number of men and women employed in the manufactories of this city in 1870, as carefully collected by Lorin Blodget, was 127,590, of which the men are 72 per cent. The total number of "youths" employed was 10,286; and supposing the boys to be in the proportion of 60 per cent., there will be 6,172 of them. Of these a very large number are children below the age of 16, the lowest age of apprentices, and many are not in any sense apprentices, so that the male "learners of trades" must be expressed by a much smaller number. The census report gives 5,832 as the "total number of apprentices," boys and girls, which no doubt includes many besides apprentices proper, while it is not likely to omit many of them. Taking the boys at 60 per cent., we have 3,500 as the extreme number of male apprentices in this city in 1870. There are about 8,000 establishments in which men and boys are employed, and 92,112 workmen in shops. The apprentices, therefore, cannot exceed the proportion of 1 to every $2\frac{1}{4}$ shops, and to every 26 workmen—a proportion not equal to the requirements of the guilds, or the allowance of the trades unions. As the number of boys between the ages of 16 and 21 must be at least 25,000, of whom not over 3,000 are

in school or college, it would seem that the small number of apprentices cannot be due to a deficiency of material.

But why do the boys learn trades? That is a question which brings us to the heart of our subject. In the first place, boys are human; and in the second place, they are boys unfortunately, their parents are human, too, and the natural indisposition to hard work, and preference for clean hands and clothes, is not always discouraged by parental ambition. The class of whom this may be said, though it may need it more, deserves not so much our sympathy as another, where ambition or necessity obliges the father to forego some of this indulgence, that the son may aid him in the support of the family, or be fitted to maintain another. Perhaps it is a mother, alone, but for the boy who is forced into the unnatural position of his parent's adviser, in deciding the momentous question of a trade. There are long discussions as to whether the family purse can bear the strain of the first two or three years, while the boy earns only his own board; and all choice must often be subordinated to the necessity of taking the trade which pays best and soonest. The first decision is perhaps for that of a machinist, which seems to have a great attraction for most boys. Yes, and our hero finds on the books of the larger establishments to which he first applies forty or fifty names already entered, waiting their turn. He cannot wait six months or a year, besides he finds that in the large shops frequently a boy works during his whole term on a few machines, and does not learn the whole "handcraft." He goes to the smaller shops where the applicants are fewer, but the vacancies are fewer still. He asks a neighboring carpenter and builder for a place. But this trade does not take to boys. The work is all prepared in mills, by men who have learned carpentering in the old times, or who have learned to attend a single machine, and there is nothing for a boy to do. He may not be strong enough for blacksmithing, and there are few boys wanted in the shops where general work is done, as the steam hammer can be both boy and man.

The bricklayers also seem "not to approve of boys"—as the master can oversee them but little, from the nature of the employment; bad work is a serious thing to remedy; and the contract system of building requires great economy and dispatch only. Boys who can stand hard work, too, need apply. With both

bricklayers and plasterers there is a prejudice against boys, as so many unfaithful learners have brought discredit on the name. He asks to be a moulder; there is a better opening here, and the wages are good—beginning with \$3.50 or \$4.00 per week—but almost anywhere, but in this city, (and here, too, until a few years ago), the Union tells him that they allow but one apprentice to every ten men in a shop, after the one to which each shop is entitled. One here has another rebuff from this source, when he asks to learn the art of printing. A rule of the Union declares that no member shall work in any *newspaper* office employing an apprentice, and allows in other offices only one apprentice to every five men, after the one to which each office is entitled. Repressing his ambition for the constructive arts, and that preservative of all others, one lad would be a tailor, or shoemaker. But scarcely any one will take apprentices at these trades. I am told that it is doubtful whether there is in this city an apprentice in the former—and that there are probably not over a dozen shops employing them in the latter. The work among tailors is done by men, mostly of foreign birth, each employing a female helper or two. But the best of the "foreign talent" does not immigrate, for of the 3,000 sewing tailors in the city, only about 300 are capable of the finest work. Notwithstanding the lack of learners among shoemakers, however, their Union forbids the employment in the shoe factories (where wages of \$25 per week are often made, and the greater part of the shoes for city and country trade) of any but those who have learned the art, at least so as to be able to make in some sort a shoe. Of course, the supply must be kept up by importation, or by half-educated home-learners tempted by the high wages—to work a year or two at the bench as apprentices. The bricklayer's and plasterer's Unions, too, have their restrictive rules, but they are not now enforced. The hatters have theirs and enforce them, I believe.

You will be as weary as our hero with further illustrations of this part of my subject. It is sufficient to say that in the majority of cases the boy is forced by necessity, or drawn by the prospect of greater immediate wages, to work in a bolt or umbrella factory, a type foundry or some such establishment, where he is paid "by the piece," and can earn five or six dollars, or more, per week. He becomes a man, but he cannot maintain a

family even on wages that allowed him to dress showily when off work; he has learned no trade that will bring him more; and is obliged to give place to another generation of boys glad to take what he has outgrown. He becomes in a small way an adventurer, seeking for pay that represents an education which he has not; and often swells the number of incompetent artisans, a "dangerous class" who do our poor work of various kinds.

We have supposed the case of a boy who wishes, or whose parents wish him, to learn a trade. But what of that large class not above the necessity of labor, and who have no one who will or can procure them places? There are about five thousand of them here, enough to form at least the nucleus of a still more dangerous class. Many of these, through a kind Providence, and some act of their own or their parents, find their way to the House of Refuge, or they are taken into some "Home," whence they are provided with places to learn trades, or at least make a living. But let no boy, disheartened in his efforts to find such a place, look with jealous eye on the graduates of the House of Refuge. Few of them are apprenticed to handicrafts, the wages of which rapidly supply the place of capital. Out of thirty-nine boys indentured in 1870, twenty-seven were placed with farmers and ten were divided among seven trades. Out of forty in 1871, twenty-six went to farmers and eleven to nine trades. The balance in each year went to occupations other than trades.

We have looked at this matter chiefly as regards the boys' interest. But it has a larger, a national aspect. The scarcity of skilled labor is a direct law of productive power, and so far a national waste. The truest capital of a country is its labor, and the standard of its value rises in proportion to its skill. That is a well-ordered household where every member contributes something to the common happiness. That is a well-ordered industrial establishment where the labor of every employee is economized. A nation partakes of the social and productive characteristics of both these organizations. In this audience, surely it is not necessary to refer to the objection that an increase of producers will lessen wages, further than to say that it lessens also the cost of all that is produced, and so makes small wages go further. Besides, I am speaking of a *change* of a multitude of almost non-producers into producers; not of an addition to the

population. And all this superabundant power is animal, not simply material, and requires to be fed, clothed and housed; so that the comparatively few competent workmen must earn enough not only for their own, but to aid in the support, in various ways, of their untaught and low-paid brethren.

In whatever way, therefore, we regard it, the evil is a serious one. No class is more fully sensible of this than workingmen, now employers, who served their apprenticeship twenty or thirty years ago, when indentures were more frequently made and respected. These say that they do not see where the skilled workers of the future are to come from. This is specially true of the trades where manual skill and strength have not been replaced by machinery. The boys who generally offer themselves for these are not such as employers feel safe in accepting. At present we obtain a large number of mechanics by immigration. Of 17,857 male immigrants for whom the labor bureau at Castle Garden, New York, found places in 1870, 3,186, say one-sixth, were mechanics. Almost all of these were settled in New York city, or its neighborhood. The trades chiefly represented were: shoemakers, 345; tailors, 315; cabinetmakers, 371; making about one-third of the whole. No doubt, of the large number not helped by this agency, many were also mechanics, and of sufficient means to be able to dispense with aid. But the same causes are at work abroad as here, as we have shown, to lower the standard of good work; and there may come a time when the student of social elegance as well as of social science may have as much reason to complain of the quality as of the price of his coat and his boots.

In what direction shall we look for a remedy for all this? To the laws of supply and demand? But these laws, if any, have superseded during the last fifty years the old apprentice laws, and to this pass are we come. The laws of Nature are blind forces, bringing good out of evil eventually, in their own destructive way, if man is incapable of utilizing them. But it is his province to study, to obey, and so to direct them, in political economy as well as in physics. The operation of the laws of trade cannot be prevented by combinations on any side, but great suffering may be avoided if a conflict is evaded. The progress of a locomotive is not stopped by a flock of sheep grazing by the track; but it is

undoubtedly better, for the engine as well as for the sheep, that some one should foresee the animals' propensity, and take the proper measures to keep them out of the way. To leave this matter to regulate itself is to leave it to the contending interests of employees and employed, which had so large a share in the breaking up of the old system. I do not enlarge upon the laws of the trade unions, because they are only a feature of this struggle. They are the narrow, but natural expression of the supposed interests of one class, in opposition to movements sometimes similar, sometimes supposed to be so, of the other. The boys, for whom I speak to-night, are in the interest of neither party, and of both; they are the children of the employer as well as of the workman, and may grow up interchangeably into either. And in their name I ask, Where is the larger spirit to which they may appeal from the three obstacles—theirself, the workman and the employer—blocking the door to apprenticeship and self-maintenance?

To whom can they appeal but to the citizens—which the man, of either class, is, and the boy is to be? In the community of interests which citizenship represents, *all* interests are harmonized. Let us turn again to our history. It was the common municipal interest in the guilds, which found them and made their rules law. The world has outgrown their system, but it can never outgrow the spirit that devised it, and that is illustrated in the works achieved under it. The state into which the old guilds grew up and dissolved, is their true successor; and though she may easily, in the confusion of a transition period, have failed to realize her inheritance, or to wield with adequate intelligence and firmness her all-pervading power, she has not renounced them. It is *her* function to control this matter of apprenticeship, the key, nay, the door itself, of the labor question.

It may be said that the less the government interferes with labor the better—and why should it concern itself to find work for children rather than any other class? It might be answered, because they *are* children; but I prefer to rest my plea on the broader ground that this is not in itself a question of labor, but of education. What is education? Is it not a development of all the powers, so that that class or that one which best represents its possessor, may, by a sort of "natural selection," obtain its best

sphere of action? This is not accomplished where all lads are taught only such knowledge as prepares them to enter the counting-house, the scientific school, or the learned professions. I would have our public schools give to their pupils such a knowledge of tools, and of the simpler processes of the manual arts, that a boy could enter upon these on the same footing that he could obtain a clerkship in a store, receiving wages that will enable him to form at once the habit of accumulation, because he will be of value to his employer from the beginning. Where there should be no necessity for immediate entrance on labor, a taste formed in the rudimentary school could be cultivated in higher technical schools, controlled or aided by government.

The subdivision of old trades into specialties, which grow into new trades, and the increased use of machinery, are arguments even better than Dr. Adam Smith's, a century ago, against long apprenticeship; and the same degree of skill can be gained in less time, where to learn and to teach are the ends, than where the labor is a matter of wages, and learning an incident. This instruction in handicraft would not conflict with that in letters. It is found in England that children employed in factories and receiving school instruction alternately are better scholars as well as better workers. It is well known that our country schools, kept through the winter only, and made up of boys who work on farms during the summer, will compare favorably with city schools, whose only recess is a long holiday. The training of the eye and the hand by drawing, measuring, handling forms and materials, cannot but have a beneficial reaction on the mind; and the learning how to *work*, which is something different from bodily *exercise*, is a most desirable preparation for any position in life.

There was a time when an artisan who could no more than read and write was an exception. To extend the limits of the learning that comes from books among workingmen was the first object of the public school. It has achieved the object; but those whom it reaches do not remain of the class of workingmen. This is not stated as an objection to the system, yet if among the thousands of workmen's children who are its subjects a small minority become skilled artisans, there is certainly a want left unsupplied, if not created; and a fear may be expressed that the community is being educated away from labor. Out of 52 lads graduating

from the Philadelphia Central High School in 1848, but 7 were engaged in mechanical employments some fourteen years afterwards. Out of 38 graduating in 1867, 21 became clerks, 6 salesmen, and 4 mechanics. Of 54 graduating in 1856, 30 became clerks and salesmen, and 11 mechanics. In each case, the total number includes all of whom any record could be made. The usual graduating age is about 17 years. It may be said that the pupils of the high school are not generally from the working class; but employers say that when they served their time, apprentices come very largely from the class corresponding to that whose sons graduate from the high school. The statistics of Girard College may be expected to be different, but of the 221 former pupils who were apprentices on Dec. 31st last, about one-half only, including 26 printers, engravers, etc., were learning mechanical trades. Human progress is always by exaggerated and reactive movements; and it may be that the time had come to revert to the instruction in labor of those who formerly had little other instruction. It is certainly too late to say that government has nothing to do with education. That point has been fixed, and we are passing on to another. It will soon be too late, we hope, to say that government has nothing to do with education, further than parents desire. And certainly education will not need to be any the more "compulsory" when it holds out the prospect of a trade as well as of books.

It is too late, too, to say that the teaching of trades in schools is a new and untried notion. Industrial and technical schools, in Germany and France, have shown that it is practicable to instruct youths in this way in the manual arts, as well as polytechnic schools, here and abroad, can teach them the applied sciences. And even at home the principle of combining the study of letters and of handicrafts is illustrated in our reform schools, and in some of our benevolent institutions. Why should the State forbear to do that preventively which she does, to some extent, punitively? Why should not the children who have their natural protectors be, at least, as well provided for as those who have lost them?

I do not propose to dwell upon the details of this suggestion. My object will have been accomplished if it be fairly realized that apprenticeship, as our fathers knew it, is dying, and natu-

rally; that it belongs to a state of society which will probably never return, and that to lament its decay is as absurd as to mourn for the middle ages; yet, that the want which it supplied is more imperative than ever, and that there is no power but the State itself—the true guild—that can build anew and on broader foundations the complete system of learning—the true apprenticeship.

NEW BOOKS.

Henry Carey Baird & Co. send us E. Reshine Smith's *MANUAL OF POLITICAL ECONOMY*. The book has long been a favorite manual of ours, and we regard it as, in many respects, the best summary of the subject that has been produced. Of all the followers of Mr. Carey, Mr. Smith writes with most of systematic method and scientific form. He presses these qualities to a point that his master would perhaps consider unwarranted by the character of the subject. His work is the product of original thought and study in many departments. His chapter on the "Formation of Soils" is one of especial interest and originality. Mr. Smith has recently accepted a post of responsibility and honor in the employ of the Japanese Empire. We accept this new edition of his work (with a full index) as a parting gift to his countrymen. The publishers will send it (278 pages) for \$1.25 to any part of the United States.

The same house send us *THREE CENTURIES OF ENGLISH LITERATURE*, by Charles Duke Yonge. Mr. Yonge, who is a Professor in Queen's College, Belfast, looks at English literature from a point of view more common twenty years ago than at present. He begins his survey of the literature with Shakespeare, and brings it down to the present, not in a strictly chronological order, but discussing each branch of the literature by itself. Thus in chapters V.-IX. he discusses the historians—from Clarendon to Grote. He has evidently paid considerable attention to good critical writers and often followed their guidance, but we sometimes meet in his pages judgments which sound Philistine and even "provincial." What shall we say of a writer who finds the chief interest of Coleridge *Christable*, in its having suggested to Scott the meter of the *Lay of the Last Minstrel*, or speaks of Shelley as a genius inferior to Byron, and omits Burns, Cowper and Crabbe from the list of poets, and Edward Irving from that of the preachers. English literature has yet to wait for a native Gervinus.

Rev. John Hunt, whose *Essay on Pantheism*, excited a good deal of notice some few years ago, seems to have given up his purpose to write a series of works on the history of "Isms." At any rate he is now writing a work of much greater value and interest—*A HISTORY OF RELIGIOUS THOUGHT IN ENGLAND FROM THE REFORMATION TO THE END OF LAST CENTURY*. It is strange that no such work has ever been attempted before (excepting the imperfect sketch by J. J. Tayler) and that English theology has been so deficient in works in this department. The author's own views might be easily learned from the first two volumes, which reach from the times of Sir Thos. More to 1720. But he is always carefully and rigidly impartial in his presentation of opinions. The book is full of curious and interesting matter, and is of great interest to those who are not professional theologians. We shall be greatly mistaken if some of the facts he unearths are not made use of in coming controversies. Strahan & Co. are the publishers.

ERRATA.

MAY NUMBER, 1872.

- Page 222, last line, for "management" read arrangement.
Page 224, line 4, for "germs" read genus.
Page 224, line 23, omit "them."
Page 226, for *Entaenia*, *Butes*, *Chorophilus*, *Photoginis*, *Amiq-*
us read *Entania*, *Buteo*, *Corophilus*, *Photogenis* and *Amiurus*.
Page 227, 3d line from bottom, period after "species," and
for "as" read As.
Page 227, 2d line from bottom, read for "available" a varia-
ble.
Page 228, at top, for "for" read of.
Page 231, line 14, for *Klein* read *Kein*.
Page 232, for "prominent" read permanent.
Page 232, 4th line from bottom, for "developed" read devel-
opes.

- Page 235, for *appella* read *apella*.
Page 235, line 12, for "a usually" read an unusually.
Page 235, line 28, for "*capuchinus*" read *capucinus*.

JULY NUMBER, 1872.

- Page 382, line 12, for "primatively" read palmately.
Page 383, line 14, for "ceases" read ceases.
Page 384, bottom line, for "atonic" read atomic.
Page 385, fourth line from bottom, for "Jas." read John.

AUGUST NUMBER, 1872.

- Page 429, line 7, insert a period after "beings."
Page 437, line 21, for "mans" read its.

SEPTEMBER NUMBER, 1872.

- Page 467, line 12, insert comma after "itself."
Page 469, line 3, for "the" read their.
Page 469, line 22, for "inflaming" read influence.
Page 470, line 23, for "coincided" read coincides.
Page 470, line 24, after "awakened" insert in others.
Page 471, line 14, after "in" read human.
Page 472, line 30, for "from life unto death" read from death
unto life.

THE
PENN MONTHLY.

MAY, 1872.

OF SCIENCE AND ITS METHODS.

BY HENRY C. CAREY.

Concluded.

SEEKING now to understand the history of man in past ages or in distant lands, we must commence by studying him in the present, and having mastered him in the past and present, we may then be enabled to predict the future. To do this, it is required that we do with society as the chemist does with the piece of granite, resolving it into its several parts and studying each part separately, ascertaining how it would act were it left to itself; then comparing what *would be* its independent action with that we see *to be* its societary action. That done, by help of the same law of which the mathematician, the physicist, the chemist, and the physiologist avail themselves—that of the composition of forces—we may perhaps arrive at the law of the effect. So to do would not, however, be to adopt the course of M. Comte, who gives us the distant and the unknown—the societies of past ages—as a means of understanding the movements of the men by whom we are surrounded, and of predicting what will be those of future men. To us it seems that as well might the teacher furnish his students with a telescope by which to study the mountains of the moon, that he might be thus enabled to understand the movements of the laboratory.

The necessary consequence of this inverse and erroneous method is that he is led to arrive at conclusions directly the reverse of those to which men's natural instincts lead them; directly opposed, too, to the tendencies of thought and action in all the times of advancing civilization, whether in the ancient or modern world; the result being that he leaves his readers as much at a loss to understand the causes of disturbance that now exist, or the remedy needed to be applied, as would a physician who should limit the study of his patient to an examination of the body in a mass, omitting all inquiry into the state of the lungs, the stomach, or the brain. His system of sociology does not explain the past, and cannot therefore be used to direct the future; the reason why it neither does nor can do so being that he has declined to use the method of physics, that philosophy which studies the near and the known for the purpose of obtaining power to comprehend the distant and the unknown; which studies the present to obtain knowledge by aid of which to understand the causes of events in the past, and to predict those which are bound to flow from similar causes in the future.

§ 5. Turning from France to Britain, we find ourselves in the home of Adam Smith, whose most essential doctrines have, however, been wholly repudiated by his successors of that modern school which had its origin in the teachings of Messrs. Malthus and Ricardo. "Social Science," as the world is there taught by one of its most distinguished teachers, "is a deductive science; not indeed," as he continues, "after the model of geometry, but after that of the highest physical science. It infers the law of each effect from the laws of causation upon which the effect depends; not, however, from the law merely of one cause, as in the geometrical method, but by considering all the causes which conjointly influence the effect, and compounding these laws with one another."*

Such is the theory. The practice under it consists in providing for the use of science a politico-economical man, or monster, on one hand influenced solely by the thirst for wealth, and on the other so entirely under the control of the sexual passion as to be at all times ready to indulge it, however greatly such indulgence may tend to prevent the growth of wealth.†

* J. S. Mill. *System of Logic*, Book vi. ch. 8.

† See *ante*, Vol. 2, p. 475.

What, however, is this thing in the quest for which he is so assiduously engaged? What is wealth? To this question political economy furnishes no reply, it having never yet been settled in what it is that wealth consists. Were it suggested that land constituted any part thereof, the answer would at once be made, that by reason of a great law of nature the more of it brought into use, and the larger the quantity of labor given to its improvement, the less must be the return to human effort, the poorer must the community become, and the greater must be the tendency toward poverty and death; the law of constantly diminishing returns to labor applied to cultivation being, as Mr. Mill assures us, the most important one in the whole range of economic science. Were it next assumed that wealth might be found in development of the individual faculties, proof sufficient could be furnished that not only would search in that direction be vain, but that it would result in establishment of the fact that increase in the number of teachers must be attended with diminution of the quantity of wealth at the community's command.* Foiled thus in all his efforts, the inquirer, after having studied carefully all the books, would still be found repeating the question—What is wealth?

Turning next to the being so sedulously engaged in the pursuit of an undefined something that seems to embrace so much, and that yet excludes so large a proportion of the things usually regarded as wealth, he would desire to satisfy himself if the subject of political economy were really the being known as man. He might perhaps be led to ask, has man no other qualities than those here attributed to him? Is he, like the beasts of the field, solely given to the search for food, and for shelter to his body? Does he, like them, beget children for the sole gratification of his passions, and does he, like them, leave his offspring to feed and shelter themselves as they may? Has he no feelings or affections to be influenced by the care of wife and children? Has he no judgment to aid him in the decision as to what is likely to benefit or to injure him? That he did possess such qualities would be admitted, but the economist would assure him that his science was that of material wealth alone, to the entire exclusion of that

* See Mill, *Principles*, 6th edition, vol. i. p. 61.

wealth of affection and intellect held by Adam Smith in such high esteem; and thus would he, at the close of all his search, discover that the subject of political economy was not really a man, but an imaginary being moved to action by the blindest passion, and giving all his energies to the pursuit of a thing in its nature so undefinable that all the books in use might be searched for a definition that would be admitted by a jury of economists as embracing all that should be included, and excluding all that should not.

The law of the composition of forces requires that we study *all* the causes tending to produce a given effect. That effect is MAN—the man of the past and the present; and the social philosopher who excludes from consideration his feelings and affections, and the intellect with which he has been endowed, makes precisely the same mistake that would be made by the physical one who should look exclusively to gravitation, forgetting heat; and should thence conclude that at no distant day the whole material of which the earth is composed would become a solid mass, plants, animals, and men having disappeared. Such is the error of modern political economy, its effects exhibiting themselves in the fact that it presents for our consideration a mere brute animal, to find a name for which it desecrates the word “man,” recognized by Adam Smith as expressing the idea of a being made in the likeness of its Creator.

It was well asked by Goethe—“What is all intercourse with nature, if by the analytical method we merely occupy ourselves with individual material parts, and do not feel the breath of the spirit which prescribes to every part its direction, and orders or sanctions every deviation by means of an inherent law?” And what, we may ask, is the value of an analytical process that selects only the “material parts” of man—those which are common to himself and the beast—carefully excluding those common to the angels and himself? Such is the course of modern political economy, which not only does not “feel the breath of the spirit,” but even ignores the existence of the spirit itself, and is therefore found defining what it is pleased to call the natural rate of wages, as being “that price which is necessary to enable the laborers, one with another, to subsist and perpetuate their race,

without either increase or diminution:"* that is to say, such price as will enable some to grow rich and increase their race, while others perish of hunger, thirst, and exposure. Such are the teachings of a system that has fairly earned the title of the "dismal science"—that one the study of which led M. Sismondi to the inquiry: What, then, is wealth everything, and is man absolutely nothing? In the eyes of modern political economy he *is* nothing, and can be nothing for the reason that it takes no note of the qualities by which he is distinguished from the brute, led thus inevitably to regarding him as a mere instrument to be used by capital for enabling its owner to obtain compensation for its use. "Some economists," said a distinguished French economist, shocked at the material character of the so-called science, "speak as if they believed that men were made for products, not products for men;"† and at that conclusion must all arrive who commence by the method of analysis, and close with exclusion of all the higher and distinctive qualities of man.

§ 6. In the progress of knowledge we find ourselves gradually passing from the compound to the simple; from that which is abstruse and difficult to that which is plain and easily learned. That simplicity and truth travel generally together is proved by the beautiful simplicity and wonderful breadth of propositions in science—themselves the result of a long induction—leading to the knowledge of great truths not at first perceptible, but when announced so conclusive as to close, almost at once and forever, all discussion in reference thereto. The falling of the apple led Newton to the law of gravitation, and to the discovery of that law we owe the astonishing perfection of modern astronomy. The establishment of the identity of lightning and electricity laid the foundation of a science by help of which we have been enabled to command the services of a great power in nature that has to a great extent superseded the contrivances of man. Kepler and Galileo, Newton and Franklin, would have failed in their efforts to extend the domain of science had they pursued the method of M. Comte in his attempt to establish a system of social science.

* Ricardo.

† Droz. *Economie Politique*.

Does this method, however, supercede entirely the *à priori* one? Because we pursue the method of analysis, are we necessarily precluded from that of synthesis? By no means. Each in turn makes preparation for the other. It was by careful observation of particular facts that Le Verrier was led to the grand generalization that a new and unobserved planet was bound to exist, and in a certain part of the heavens; and there it was almost at once discovered. To careful analyses of various earths it was due that Davy was led to the announcement of the great fact that all earths have metallic bases—one of the grandest generalizations on record, and one whose truth is being every day more and more established. The two methods were well described by Goethe, when he said that synthesis and analysis were “the systole and diastole of human thought;” and that they were to him “like a second breathing process—never separated, ever pulsating.”

“The vice of the *à priori* method,” says the writer from whom this passage is taken, “when it wanders from the right path, is *not* that it goes before the facts, and anticipates the tardy conclusions of experience, but that it rests contented with its own verdicts, or seeking only a partial, hasty confrontation with facts—what Bacon calls ‘*notiones temerè à rebus abstractas*.’”*

Science being one and indivisible, so must the method of study be. That is so with regard to all the departments of knowledge that underlie social science—physics, chemistry, and physiology—cannot now be doubted, yet is it but recently that there has been reason to believe in any such connection. With each new discovery the approximation becomes more close, and with each we see how intimately are the facts of all the earlier and more abstract departments of knowledge connected with the progress of man toward that state of high development for which he seems to have been intended. From hour to hour, as he acquires further control over the various forces existing in nature, he is enabled to live in closer connection with his fellow man—to obtain larger supplies of food and clothing—to improve his own modes of thought and action, and to furnish better instruction to the generation destined to succeed him. The knowledge that leads to such results is but the foundation upon which we are required

* Westminster Review, Oct. 1852: Article, Goethe as a man of Science.

to build when undertaking to construct that higher department denominated social science, and the instrument that has been so successfully used in laying the foundation cannot but be found equally useful in the construction of the edifice itself.

Mathematics must there be used, as it is now in every other branch of inquiry, and the more it is used the more must sociology take the form of real science, and the more intimate become its relations with other departments of knowledge. The Malthusian law was the first instance of its application, and had it proved a true one, it would have given a precision to political economy of which before it had been utterly incapable, making the progress of man directly dependent upon numbers on one hand and the powers of the soil on the other. So, too, with Mr. Ricardo's celebrated theory of rent, by which was established what he deemed to be the natural division of labor's products among those who labored and those who owned the land on which they were raised. The *method* of both these great laws was right, and the fact of their having adopted it has properly placed their authors in the front rank of economists, giving to their works an amount of influence never before exercised by any writers on economic science. That they fell into the error above described, of "seeking only a partial, hasty confrontation with facts," and, therefore, furnished the world with theories directly the reverse of true, does not prevent us from seeing of what infinite advantage to the progress of science it would have been to have the facts brought under these relations, if true, nor of how great importance it must be to have the real facts brought under such relations whenever possible.

Let us, for example, take the following proposition :

In the early period of society, when land is abundant and people are few in number, labor is unproductive, and of the small product, the landowner or other capitalist takes a large *proportion*, leaving to the laborer a small one. The large proportion yields, however, but a small amount, and both laborer and capitalist are poor—the former so poor that he is everywhere seen to have been slave to the latter. Population and wealth, however, increasing, and labor becoming more productive, the landowner's share diminishes in its *proportion*, but increases in its *amount*. The laborer's share increases not only in its amount,

but also in its proportion, and the more rapid the increase in the productiveness of his labor the greater is the *proportion* of the augmented quantity retained by him; and thus, while the interests of both are in perfect harmony with each other, there is a constant tendency toward the establishment of an equality of condition—the slave of the early period becoming the free man of the latter one.

Admitting this to be true—and if so it establishes directly the reverse of what was propounded by Messrs. Malthus and Ricardo—we have here the distinct expression of a mathematical relation between the concomitant variations of power of both man and matter—of the man representing only his own faculties, and of the man representing the accumulated results of human faculties exerted upon matter and its forces. The problem of social science, and the one attempted to be solved, is: "What are the relations of man and the outside material world?" They change, as we see, men becoming, in some countries, from year to year more and more the masters, and in others, the slaves of nature. In what manner is it that changes in one tend to produce further changes in itself, or to effect changes in the other? To this question we need a mathematical answer, and until it be furnished—as it is believed to be in the above very simple proposition—political economy can bear only the same relation to social science that the observations of the Chaldean shepherds bear to modern astronomy.

Social science can scarcely be said to have an existence. That it might exist it was essential to possess the physical, chemical, and physiological knowledge required for enabling us to observe how it is that man is enabled to obtain command over the various forces provided for his use, and to pass from being the slave to becoming the master of nature. "Man," says Goethe, "only knows himself in as far as he knows external nature," and it was needed that the more abstract and general departments of knowledge should acquire a state of high development before we could advantageously enter upon the study of the highly concrete and special, and infinitely variable, science of the laws by which he is governed in his relations with the external world, and with his fellow-man. Chemistry and physiology are both, however, of recent date. A century since, men knew nothing of the composi-

tion of the air they breathed, and it is within that period that Haller laid the foundation of the physiological science that now exists. In physics, even, the Aristotelian doctrine of the four elements had yet possession of many of the schools, and still probably remains in some of those on the outer borders of civilization. In this state of things there could be but little progress toward attainment of the knowledge how far it was in the power of man to compel the earth to yield the supplies required for a steadily increasing population; and without that knowledge there could be no such thing as social science.

Science requires laws, and laws are but universal truths—truths to which no exceptions can be found. These obtained, harmony and order take the place of chaos, and we are led in every department of knowledge as much to recognize effects as having been the natural results of certain definite causes, and to look for the reappearance of similar effects when like causes shall again occur, as did the first man when he had definitely connected the presence and absence of light with the rising and setting of the sun.

Where, however, is there in social science a proposition whose truth is universally admitted? There is not even a single one. A century since, the strength of a nation was regarded as tending to increase with augmentation of its numbers, but now we are taught that growth of numbers brings with it weakness instead of strength. From year to year we have new theories of the laws of population, and new modifications of the old one; and the question of the laws governing the distribution of the proceeds of labor between the owner and occupier of land is now discussed as vigorously as it was half a century since. Of the disciples of Messieurs Malthus and Ricardo, scarcely any two are agreed as to what it was that they really meant to teach. On one day we are told that the Ricardo-Malthusian doctrine is dead, and on the next we learn that it is an evidence of want of knowledge to doubt its truth; and yet the parties to whom we are indebted for all this knowledge belong to the same politico-economical school.* The

* "We believe it (the Ricardo principle of rent) dominates in the long run, and is the main cause of the decline of nations. * * We believe the law of population to which Malthus first directed public attention, to be founded in fact."—*London Spectator*.

strongest advocates for the removal of all restrictions on trade in cloth are found among the fiercest opponents of freedom of the trade in money ; and among the most enthusiastic friends of competition for the sale of merchandise are to be found the most decided opponents of competition for the purchase of the laborer's time and talents. Teachers who rejoice in everything tending to increase the prices of cloth and iron, as leading to improvement in the condition of men, are found among the foremost of those who deprecate advance in the price of the laborer's services, as tending to the diminution of power for the maintenance of trade. Others who teach non-interference by government when it looks to the diffusion of knowledge among the people, are among the most decided as to the propriety of such interference when it looks to measures leading to war and waste. All being therefore confusion, nothing is settled ; as a necessary consequence of which the world looks quietly on, waiting the time when the teachers shall arrive at some understanding among themselves as to that first of all conditions incident to the existence of any branch of science, to wit : the real value of the terms in use.

§ 7. The causes of the existence of this state of things are readily explained. Above all others, social science is the most concrete and special ; the most dependent on the earlier and more abstract departments of science ; the one in which the facts are most difficult of collection and analysis ; and, therefore, very late in making its appearance on the stage. Of all, too, it is the only one that affects the interests of men, their feelings, passions, prejudices, profits, and, therefore, the one in which it is most difficult to find men collating facts with the sole view to deduce from them the knowledge they are calculated to afford. Treating, as it does, of the relations between man and man, it has everywhere to meet the objection of those who seek the enjoyment of power and privilege at the cost of their fellow-men. The sovereign holds in small respect the science that would teach his subjects to doubt the propriety of his exercise of power by the grace of God. The soldier cannot believe in one that looks to the annihilation

"Nobody, except a few mere writers, now troubles himself about Malthus on population, or Ricardo on rent. Their error may yet indeed linger in the universities, the appropriate depositories of what is obsolete."—*London Economist*, same date.

of his trade, nor can the monopolist readily be made to believe in the advantages of competition. The politician, living by managing the affairs of others, has small desire to see the people taught the proper management of their own concerns. All these profiting by teaching falsehood, they therefore frown upon those who seek to teach the truth. The landlord believes in one doctrine and his tenant in another; the payer of wages, meantime, looking at all questions from a point of sight directly the opposite of the one occupied by him to whom the wages are paid.

We here meet a difficulty with which, as has been already said, no other science has had to contend. Astronomy has wrought its way to its present prodigious height with but temporary opposition from the schools, because no one was personally interested in continuing to teach the revolution of the sun around the earth. For a time the teachers, secular and spiritual, were disposed to deny the movement of the latter, but the fact was proved and opposition ceased. Such, too, was the case when geology began to teach that the earth had had a longer existence than previously had been believed. The schools that represented by-gone days did then as they had done in the days of Copernicus and Galileo, denouncing as heretics all who doubted the accuracy of the received chronology, but short as is the time that has since elapsed, the opposition has already disappeared. Franklin, Dalton, Wollaston, and Berzelius prosecuted their inquiries without fear of opposition, their discoveries being unlikely to affect injuriously the pockets of the land-owners, merchants, or politicians. Social science is, however, still to a great extent in the hands of the schoolmen, backed everywhere by those who profit by the ignorance and weakness of the people.

The occupants of academic chairs in Austria or Russia may not teach what is unfavorable to the divine rights of kings, or favorable to increase in the powers of the people. The doctrines of the schools of France vary from time to time as despotism yields to the people, or the people yield to it. The landed aristocracy of England was gratified when Mr. Malthus satisfied it that the poverty and misery of the people resulted necessarily from a great emanating from an all-wise and all-benevolent Creator; and the manufacturing one is equally so when it sees, as it thinks, the fact established, that the general interests of the country are to be pro-

moted by measures looking to the production of an abundant supply of cheap, or badly paid, labor.

Social science, as taught in most of the colleges of this country and of Europe, is now on a level with the chemical science of the early part of the last century; and there it will remain so long as its teachers shall continue to look inward to their own minds and *invent* theories, instead of looking outward to the great laboratory of the world for the collection of facts with the view to the *discovery* of laws. In default of such laws they are constantly repeating phrases that have no real meaning, and that tend, as Goethe most truly says, to "ossify the organs of intelligence" of their hearers and themselves.*

The state in which it now exists is what M. Comte is accustomed to denominate the metaphysical one, and there it must continue to remain until its teachers shall waken to this fact, that there is but one system of laws for the government of all matter, whether existing in the form of a piece of coal, a tree, a horse, or a man—and but one mode of study for all departments of it. "The leaf," says a recent writer, "is to the plant what the microcosm is to the macrocosm—it is the plant in miniature—a common law governs the two, and, therefore, whatever disposition we find in the parts of the leaf, we may expect to find in the parts of the plant, and *vice versa*." So is it with the tree of science and its many branches, what is true of its root cannot be otherwise than true of the leaves and the fruit. The laws of physical science are equally those of social science, and in every effort to discover the former we are but paving the way for the discovery of the latter. "The entire succession of men," said Pascal, "through the whole course of ages, must be regarded as one man, always living and inces-

* "The pagan, the idolater, the ignorant, even of the Catholic church, worship their stocks and stones; and instead of regarding these as signs only shadowing forth what in its intellectual state the human mind cannot otherwise express of its religious sentiments, takes the signs for the things they represent, and worships them as facts. We, too, worship our signs—our words. Let any man set himself to the task of examining the state of his knowledge on the most important subjects, divine or human, and he will find himself a mere-word-worshiper; he will find words without ideas or meaning in his mind venerated, made idols of—idols different from those carved in wood or stone only by being stamped by printer's ink on white paper."—Laing, *Chronicle of the Sea Kings*, *Introd. Dissertation*, chap. ii.

santly learning;" and among the men who have most largely contributed toward the foundation of a true social science are to be ranked the eminent teachers to whose labors we have been so largely indebted for the great development of physical, chemical and physiological science in the last and present centuries.

The later man is, therefore, the one possessing the most of that knowledge of societary operations required for comprehending the causes of the various effects recorded in the historic page, and for predicting those which must result in future from causes now existing. The early man possessed little of science but the instrument required for its acquisition, and what of it he did acquire was purely physical in its character and most limited in its extent. The existing one is in possession not only of physical science to an extent that is wonderful compared with what existed a century since, but to this has added the chemical and physiological sciences then scarcely known, and has proved the existence throughout of a harmony that before had been unimagined. If, then, there is truth in Pascal's suggestion, may it not be that the laws of all the earlier and more abstract departments of science will be found to be equally true in reference to that highly concrete and special one which embraces the relations of man in society; and that, therefore, all science will prove to be but one, its parts differing as do the colors of the spectrum, but producing, as does the sun's ray, undecomposed, one white and bright light? To show that such is the case is the object of the present writer.*

Turning again to the figure† the reader will remark that the

* "The view propounded in this work allows, however, a greater and more important part to the share of external influences, it being believed by the author, however, that these external influences equally with the internal ones are the results of one harmonious action underlying the whole of Nature, organic and inorganic, cosmical, physical, chemical, terrestrial, vital, and social."—Mivart, *Genesis of Species*, London, 1871.

"All science is but the partial reflection, in the reason of man, of the great all-prevailing reason of the universe. And thus the unity of science is the reflection of the unity of nature, and of the unity of that supreme reason and intelligence which pervades and rules over Nature, and from whence all reason and all science is derived."—Rev. Baden Powell.

† We give herewith the figure referred to in several places, which was inadvertently omitted last month.—Ed. P. M.

branch of science of which it is proposed to treat finds its place between those of the material and mental life, organology and psychology, and that it is through it that both must look for their development. That the mind may be active and vigorous, the body must be properly cared for. Social science looks to the care of both. It treats of the relations of man with the physical world over which it is given to him to rule, and with that social one in which it is given to him to perform a part. Upon the nature of those relations depends the stimulation into activity of those qualities which constitute the real MAN—those by which he stands distinguished from other animals. What they are may be hereafter shown.

EVOLUTION AND ITS CONSEQUENCES.

THE broad theory of evolution includes the theories of development of the solar system and its members, as expressed by the nebular hypothesis; the theory of development of life by molecular movements consequent upon certain combinations of non-living matter; and lastly, the theory of development of the species of animals and plants by descent, the later from the earlier, with accompanying change of form and character. It attempts nothing less than a history of the process of creation of the universe, so far as we can behold it; and is, therefore, an attempt to formulate the plans and thoughts of the Author of that universe. Hence, it is not surprising that it excites the interest of the best of men, especially as it is one of the results of the efforts of a class of these, crowning many centuries of labor and thought.

The object of the present essay is to discuss familiarly the latter of these theories of evolution, viz.: that respecting the species of animals and plants. As all are aware, this mode of accounting for the creation of organized beings has attained especial prominence at the present time, and possesses more of interest to most readers, because of its explanation of our own origin. Moreover, it rests on more indubitable evidence than the two other theories. The constitution and management of the members of the solar system

point to their origin by derivation from primal masses of vaporous matter through the mutual operation of the ordinary laws of attraction and motion. The *positioning* is precisely as it should be, had such process taken place, but the process itself, that is, the change from type to type of celestial body, has not been observed.

The case is far different with the theory, as regards organized or living beings. Not only are the mutual relations of animals and plants to each other such as should have resulted from a descent or development, but the changes from type to type have been actually observed, and in sufficient number to place the hypothesis on the basis of ascertained fact, as referring to a certain range of objects—say in the case of the animal kingdom to individuals distinguished by structural characters within the range of each of the three to six great primary divisions or “branches.”

There are two totally distinct propositions involved in this question, which are confounded by the general public, and not unfrequently by students and writers on it. These are, first, the evidence which seems to prove that this evolution has taken place; secondly, the evidence as to the nature of the laws of its progress. A want of constant distinction between these views of the case has greatly obscured it, and injured the evidence on one side or the other.

The evidence in favor of evolution is abundant, and is cited in fragments by various contemporary writers, foremost among whom, both in time and abundance of writings, comes Charles Darwin.

Much less has been done in explanation of the laws of evolution. Darwin and his immediate followers have brought out the law of Natural Selection; Spencer has endeavored to express them in terms of force, while Hyatt, Cope, Packard and others have advanced the law of “Acceleration and Retardation.”

In earlier days, when information was distributed slowly, and books were few, it was long before any new truth or doctrine reached the majority of people, still less was adopted by the ruling classes. But the modern theory of evolution has been spread everywhere with unexampled rapidity, thanks to our means of printing and transportation. It has met with remarkably rapid acceptance by those best qualified to judge of its merits, viz.: the zoölogists and botanists, while probably a majority of the public, in this region at least, profess to reject it. This inconsistency is

due to two principal causes. In the first place Darwin's demonstration contained in the "Origin of Species," extends little further than as stated in the title of his work. He proves little more than that species of the same germs or other restricted groups have had a common origin; and further, his theory of Natural Selection is to the plainest understanding, incomplete as an explanation of their "origin," as its author indeed freely allows. Besides, the unscientific world is particularly unreasonable on one point. Little knowing the slow steps and laborious effort by which any general truth is reached, they find in incompleteness ground of condemnation of the whole. Science is glad if she can prove that the earth stands on an elephant, and gladder if she can demonstrate that the elephant stands on a turtle; but if she cannot show the support of the turtle, she is not discouraged, but labors patiently, trusting that the future of discovery will justify the experience of the past.

If, then, some of the people find Mr. Darwin's argument incomplete, or in some points weak, it may be answered, so do the student classes who believe it. This is largely because Darwin's facts and thoughts repeat a vast multiplicity of experiences of every student, which are of as much or more value than those cited by him, and which only required a courageous officer to marshal them into line, a mighty host, conquering and to conquer. These will slowly find their way into print, some in one country and some in another.

The public have not the benefit of this information as yet, and they are to be excused if to this disadvantage is added the powerful influence of the older class of theologians in opposition to these views. Truly, the Christian Church has been the recipient of good gifts since her origin. The moral lives and noble aspirations which have followed it have given time and stimulus for the cultivation of the sciences and useful arts; with what success the world knows. The knowledge of the truths of evolution will prove one of the best of these gifts. How much superior this to Pagan superstition or Mohammedan fatalism. Said the sheikh of an Arabian town to Palgrave, on being asked the population of the village where he dwelt, "I have now lived here nearly eighty years, and have never asked the number of the people;" and

when asked as to the motions of some of the stars, declared they "moved by the will of God—let them go."

But those who exercise the best gift in the Christian Church—that of the ministry, which deals with *men*, and not with *things*—have ever been prone to forget the limits of their calling, and assume to a knowledge which has "puffed up," and which their occupation has not given them the means of acquiring. The sons of knowledge have ever been at their side, but too often have they checked their aspirations, denied their truths, and consequently kept their fellow-men in intellectual land, therefore, spiritual darkness to a certain degree.

But oppression has ever returned to curse its authors, who have had to learn, time and again, that the gifts of ministration to the spiritual needs of mankind, and those of knowledge to supply their intellectual natures, are rarely combined in the same men. Truth once uttered, is ever after a power in the world, and men feed upon it, for it is indeed their natural food. What can ecclesiasticism say in defense of its treatment of Galileo? How pleasurable to it is the retrospect of its condemnation of the plain geological truth uttered by Buffon? What comfort can priests now take in their assertion that the world was made in six days? So will they be ashamed of their prejudged denial of the great truths of evolution. This kind of ecclesiasticism is born in ignorance, and too often nursed in self-conceit, and is one evidence that the church needs the great doctrine of justification by faith for its teachers, no less than for the taught.

I.—THE FACT OF EVOLUTION.

As to the truth of the theory, the proof has been stated in more than one form. The first and simplest, and essentially the central argument of Darwin, is as follows:

In every family or larger group of animals and plants, there exists one or more genera in which the species present an aggregation of specific intensity of form; that is, that species become more and more closely related, and finally varieties of single species have to be admitted for the sake of obtaining a systematic definition or "diagnosis," which will apply to all the individuals. These varieties are frequently as well marked as the nearly-related species, so far as *amount* of difference is concerned, the distinction between

the two cases being, that in the varieties there is a gradation from one to the other; in the species, none. Nevertheless, between some of the varieties transitions may be of rare occurrence, and in the case of the "species," an intermediate individual or two may occasionally be found. Thus it is that differences, called varietal and specific, are distinguished by degree only, and not in kind and are, therefore, the results of the operation of uniform laws. Yet, according to the old theory, the varieties have a common origin, and the species an independent one! To find examples of what is asserted, it is only necessary to refer to the diagnostic tables and keys of the best and most honest zoölogists and botanists. It is true that these diagnoses are dry reading to the non-professional, yet they embrace nearly all that is of value in this part of biological science, and must be mastered in some department before the student is in possession of the means of forming an opinion. The neglect to do this explains why it is that, after all that has been written and said about *protean* species, etc., the subject should be so little understood.

It is true that in but few of these cases have the varieties been seen to be bred from common parents, a circumstance entirely owing to the difficulties of observation. The reasoning derived from the relations of differences, appears to be conclusive as to their common origin, unless we are prepared to adopt the opposite view, that the varieties have originated separately. As these avowedly grade into individual variations, we must at once be led to believe that individuals have been created independently—a manifest absurdity.

But variations in the same brood have been found among wild animals; for example, both the red and gray varieties of the little horned owl (*Scops asio*) have been taken from the same nest.

As further examples of gradation between species and variety, found in nature, I only have to select those genera most numerous in species, and *best studied*. Among birds, *Corvus*, *Empidonax*, *Butes*, *Falco*, etc. Reptiles, *Entaenia*, *Anolis*, *Lycodon*, *Naja*, *Candisona*, *Elaps*, *Oxyrhopus*, etc. Batrachia; *Rana*, *Hyla*, *Choraphilus*, *Borborocoetes*, *Amblystoma*, *Spelerpes*, etc. Fishes, *Ptychostomus*, *Phatoginus*, *Plecostomus*, *Amigrus*, *Salmo*, *Perca*, and many others.

In all these groups of species, or "genera," it is impossible in

some cases to determine what is variety and what species. This is notoriously the case with the salmon and trout (*salmo*), for one of the greatest opponents of close division of species, Dr. Günther, of London, thought himself necessitated, a very few years ago, to name and describe half a dozen or more new species of trout from the lakes of the British Islands, and from being a staunch supporter of the old view of distinct creations, was completely converted to evolutionism. It is even said that a recent study of the trout of the United States has shaken Agassiz's faith in his old hostility to development; certain it is that for some years past the voice of this distinguished zoölogist has been silent on the subject.

Such is one of the views which has forced conviction on the minds of thoroughly honest men who were not only desirous of knowing the truth, but were in many cases brought over from a position of strong opposition. But the earnest objector says, you have not after all shown me any real transitions from species to species; until that is done your development is but a supposition.

The all-sufficient answer to this statement is to be found in the imperfection of our system of classification. Thus, if we first assume, with the anti-developmentalists, that varieties have a common parentage, and species distinct ones, when intermediate forms connecting so-called species are discovered, we must confess ourselves in error, and admit that the forms supposed to have had different origin really had a common one. Such intermediate forms really establish the connection between species, but the question is begged at once by asserting unity of species, and, therefore, of origin, so soon as the intermediate form is found; for, as before observed, it is not degree, but constancy of distinction, which establishes the species of the zoölogical systems. Transitions between species are constantly discovered in existing animals; when numerous in individuals, the more diverse forms are regarded as "aberrant;" when few, the extremes become "varieties," and it is only necessary to destroy the annectant forms altogether to leave two or more species, as the whole of available species generally has wide geographical range, the varieties coinciding with sub-areas, the submergence, or other

change, for the intervening surface would destroy connecting forms and naturally produce the isolated species.

Formerly naturalists sometimes did this in their studies. A zoölogist known to fame once pointed out to me some troublesome specimens which set his attempts at definition of certain species at defiance. "These," said he, "are the kind that I throw out of the window." Naturalists having abandoned "throwing puzzling forms out of the window," the result of more honest study is a belief in evolution by nine-tenths of them.

But, says the inquirer again, your variations and transitions are but a drop in the ocean of well distinguished species, classes, etc. The permanent distinction of species is matter of every-day observation; your examples of changes are few and far between, and utterly insufficient for your purpose.

It is true that the cases of transition, intermediate forms, or diversity in the brood, observed and cited by naturalists, proof of evolution, are few compared with the number of well-defined, isolated species, genera, etc., known; though far more numerous than the book-student of natural history is apt to discover. But although the origin of most species by descent has not been observed, every one knows the worthlessness of argument based on a negative. Unless these cases exhibit opposing evidence of a positive character, they are absolutely silent witnesses.

He who cites them against evolution commits the error of the native of the Green Isle, who was present at a murder trial. "Although the prosecuting attorney brought three witnesses to swear positively that they saw the murder committed, I could produce *thirty* who swore they did not see it done!"

By the inductive process of reasoning we transfer the unknown to the known, for it is the key of knowledge. Its results constitute the wisdom of experience; *wisdom* especially, when it refers to the laws obeyed by human nature and human action, and *knowledge*, when it refers especially to the worlds around us. These conclusions constitute the basis of the daily acts of our lives.

It rests upon the invariability of Nature's operations under identical circumstances, and for its application merely demands that analysis and comparison shall fix that the nature of that of which something is unknown, is identical with that of which the

same thing is known. We then with certainty refer that which is known as an attribute of that object of which the same quality had been previously unknown. The following form exhibits its application to the question of evolution. As preliminary facts it may be assumed that:

1. Many species are composed of identical elemental parts which present minor differences.

2. Some of these differences have been seen to originate spontaneously from parents which did not possess them, or what is the same thing, are known to exist in individuals whose parentage is identical with others which do not possess them.

3. The gradation of differences of the same elemental parts is one of degree only, and not of kind.

4. *Induction.* Therefore all such differences have originated by a modification in growth, or have made their appearance without transmission in descent.

II. THE MANNER OF EVOLUTION.

In discussing this point, new evidence in favor of development must be produced, and some statements of the history of the opinion made.

The laws which are expressed by all that we find of structure in animals are four, viz.:

1. *Homology.* This means that animals are composed of corresponding parts; that the variations of an original and fixed number of elements constitute their only differences. A part large in one animal may be small in another, or *vice versa*; or complex in one and simple in another. The analysis of animals with skeletons or vertebrata has yielded several hundred original elements, out of which the 28,000 included species are constructed. Different this from the inorganic world, which can only claim about sixty-two elemental substances. The study of homologies is thus an extended one, and is far from complete at the present day.

2. *Successional Relation.* This expresses the fact that species naturally arrange themselves into series in consequence of a mathematical order of excess and deficiency in some feature or features. Thus species with three toes naturally intervene between those with one and four toes. So with the number of chambers of the

heart, of segments of the body, the skeleton, etc. There are greater series and lesser series, and mistakes are easily made by taking the one for the other.

3. *Parallelism*. This states that while all animals in their embryonic and later growth pass through a number of stages and conditions, some traverse more, and others traverse fewer stages; and that as the stages are nearly the same for both, those which accomplish less resemble or are *parallel* with the young of those which accomplish more. This is the broad statement, and is qualified by the details.

4. *Teleology*. This is the law of adaptation so much dwelt upon by the old writers, and admired in its exhibitions by men generally. It includes the many cases of fitness of a structure for its special use, and expresses broadly the general adaptations of an animal to its home and habits.

Of course these laws must be all laws of evolution, if evolution be true. And such they are; but this is far from being perceived by some students, for some of them were in abeyance or neglect prior to the stimulus to thought, caused by the appearance of the "Origin of Species."

Forty or fifty years ago Germany had been flooded with the writings of the "Physiophilosophs" Oken and Goethe had obtained glimpses of the wonderful "unity in variety" expressed by the laws of homology. The latter saw vertebræ in the segments of the skull, and leaves in the floral organs of plants. He had found the magic wand, and many were the harmonious visions that delighted the laborious toilers among old bones and dusty skins; the patient haruspices saw omens in the intestines of birds and snakes, and he whose hours were spent over his lens, ceased to be a mere wondermonger. But fashion is fashion, and always ends in absurdity and stagnation. The physiophilosophs became extravagant, and mistook superficial appearances for realites. They did not dream how misleading some of the resemblances between different elements, for example, of the skeleton may be, and for once German students did not analyze exhaustively. Cuvier laughed at these seekers for beauty, and confounded the true and the untrue in one condemnation. But the best men labored forward; errors began to be exposed, and soon a reaction set in. Another extreme followed, and the school of Müller, at

Berlin, denied the meaning of these resemblances and ceased to see anything but differences. Minute and thorough investigation flourished in their hands, and the modern school of German anatomists has seen no superiors. So the theory of evolution found Berlin. The disfavor in which physiophilosophy was held, secured to evolution a cold welcome, and it has been for Jena and other universities to give it its true impetus in Germany.

So it has been with the law of parallelism. Some of the physiophilosophs declared it, stating that the inferior animals were merely the repressed conditions of the higher. This view was taught by some men in high position in France. Their statements were, however, too broad and uncritical. The father of embryology, Von Baer, of Koenigsberg, declared there was "*Klein Rede*" of such theory, and Lereboullet stated "that it is founded on false and deceptive appearances." Even Professor Agassiz in our day has asserted that no embryonic animal is ever the same as the adult of another, though he also once informed the writer that the embryology of two nearly related species had never been studied and compared. This was subsequently done by Professor Hyatt, of Salem, for the nautilus and ammonite division of mollusks, and at about the same time by the writer, for many species of our native frogs and salamanders, and the result has been a complete clearing up of the confusion about parallelism, and the clear establishment of the law.

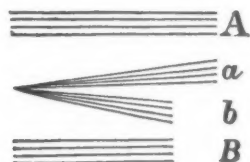
The results attained are these. The smaller the number of structural characters which separate the two species when adult, the more nearly will the less complete of the series be identical with an incomplete stage of the higher species. As we compare species which are more and more different, the more necessarily must we confine the assertion of parallelism to single parts of the animals, and less to the whole animal. When we reach species as far removed as man and a shark, which are separated by the extent of the series of vertebrated animals, we can only say that the infant man is identical in its numerous origins of the arteries from the heart, and in the cartilaginous skeleton, with the class of sharks, and in but few other respects. But the importance of this consideration must be seen from the fact that it is *on single characters of this kind that the divisions of the zoölogist depend*. Hence we can say truly that one order is identical with an in-

complete stage of another order, though the species of the one may never at the present time bear the same relation in their entirety to the species of the other. Still more frequently can we say that such a genus is the same in character as a stage passed by the next higher genus; but when we can say this of species, then their distinction is almost gone. It will then depend on the opinion of the naturalist as to whether the repressed characters are prominent or not. Parrellelism is then reduced to this definition: that each separate character of every kind which we find in a species represents a more or less complete stage of the fullest growth of which the character appears to be capable. In proportion as those characters in one species are contrasted with those of another by reason of their number, by so much must we confine our comparison to the characters alone, and the divisions they represent; but when the contrast is reduced by reason of the fewness of differing characters, so much the more truly can we say that the one species is really a suppressed or incomplete form of the other. The denial of this principle by the authorities cited has been in consequence of this relation having been assigned to orders and classes, when the statement should have been confined to *single characters*; and divisions characterized by them. There seems, however, to have been a want of exercise of the classifying quality or power of "abstraction" of the mind on the part of the objectors. This faculty seems to be by no means so common as one would expect, judging from the systematic ideas of many.

To explain by a few examples selected at random: First, of species characters, I may cite the fact, that all deer are spotted when young, and that some of the species of eastern and southern Asia retain the spotted coloration throughout life. All salamanders are uniform, often olive during the larval stage; some species, and some individuals of other species, retain the color in maturity. To take a genus character, all the deer in the second year develop their first horn, which is unbranched and small, or a "spike." A genus of deer inhabiting South America never developed anything else. To take a character of higher grade: The exogenous plants usually present net-veined leaves, but the first pair, or those of the plumule, are of much simpler structure, being often parallel-veined; for example, the cucumbers and

squashes. Now the endogens usually produce nothing else but parallel-veined leaves, and no case is known where a plant bearing this type of leaf exhibits the net-veined type as its earliest growth. So says Professor Gray of Cambridge, good authority in such matters.

But what do these facts mean? As in growth the genus characters usually appear last, I will suppose a case where one genus represents truly, or is identical with, the incomplete stage of another one.



In *A* we have four species whose growth attains a given point, a certain number of stages having been passed prior to its termination or maturity. In *B* we have another series of four (the number a matter of no importance), which, during the period of growth, cannot be distinguished by any common, *i. e.*, generic character, from the individuals of group *A*, but whose growth has only attained to a point short of that reached by those of group *A* at maturity. Here we have a parallelism, but no true evidence of descent. But if we now find a set of individuals belonging to one species (or still better the individuals of a single brood), and therefore held to have had a common origin or parentage which present differences among themselves of the character in question, we have gained a point. We know in this case that the individuals, *a*, have attained to the completeness of character presented by group *A*, while others, *b*, of the same parentage have only attained to the structure of those of group *B*. It is perfectly obvious that the individuals of the first part of the family have grown further, and, therefore, in one sense faster, than those of group *b*. If the parents were like the individuals of the more completely grown, then the offspring which did not attain that, that is, groups *A* and *B*, are also derived from common parents,

and the more advanced have been *accelerated* or the less advanced *retarded*, as the case may have been with regard to the parents.

This is not an imaginary case, but a true representation of many cases which have come under notice. I cannot repeat them here, but refer to the original memoirs, where they may be found.*

This is a simple statement of the law of "acceleration and retardation" of some American naturalists, which probably expresses better than any other the "manner of evolution," the proposition with which we started.

Hyatt thus defines it as seen in a group of ammonites which he studied. "The young of higher species are thus constantly accelerating their development, and reducing to a more and more embryonic condition the stages of growth corresponding to the adult periods of preceding or lower species."†

This form of demonstration of evolution is of far wider application than that which I first brought forward.‡ In the latter case the induction may be limited to a certain range of variation, but the present law is as extensive as the organic world; that is, the "positioning" essential to it is found everywhere, from the lowest to the highest, and in characters from the least to the greatest in import.

Let an application be made to the origin of the human species. It is scarcely necessary to point out at the start the fact universally admitted by anatomists, that man and monkeys belong to the same order of mammalia, and differ in those minor characters, generally used to define a "family" in zoölogy, though even this degree of difference between them is matter of doubt.

* See Origin of Genera and Method of Creation, Naturalists' Agency, Salem, Mass.; or McCalla & Stavely, 237 Dock street, Philadelphia.

† On the parallelism between stages in the individual and those in the group of the tetra-bronchiata. Boston Society of Natural History, 4 to 1866, page 203.

‡ It is quite misunderstood by Darwin, as will be sufficiently evident from the following quotation from the last edition of his "Origin of Species," 1872, p. 149. "There is another possible mode of transition, namely through the acceleration or retardation of the period of reproduction. This has lately been insisted on by Prof. Cope, and others in the United States." This has only been dwelt on as accounting for a very minor grade of differences seen in race and sex.

Now these differences are as follows: In man we have the large head with prominent forehead and short jaws; short canine teeth without interruption behind (above); short arms, and thumb of hind foot not opposable. In monkeys we have the reverse of all these characters. But what do we see in young monkeys? A head and brain as large relatively to the body as in man; a facial angle quite as large as in many men, with jaws not more prominent than in some races; the arms not longer than in the long-armed races of men, that is, a little beyond half way along the femur. These observations are made on a half-grown *Cebus appella* from Brazil, a member of a group more remote from men than are the Old World apes, yet with a usually large facial angle. At the age of the individual the distinctive characters are therefore those of *homo*, with exception of the opposable thumb of the hind foot, and the longer canine tooth; nevertheless the canine tooth is shorter in the young than in the adult.

Now in the light of various cases observed, where members of the same species or brood are found at adult age to differ in the number of immature characters they possess, we may conclude that man originated in the following way. That is by a delay or retardation in growth of the body and fore-limbs as compared with the head; retardation of the jaws as compared with the brain case, and retardation in the protrusion of the canine teeth. The precise process as regards the hinder thumb remains obscure, but it is probably a very simple matter. The proportions of the young *Cebus apella* enable it to walk on the hind limbs with great facility, and it does so much more frequently than an adult *C. capuchinus* with which it is confined.

The "retardation" in the growth of the jaws still progresses. Some of our dentists have observed that the last (3d) molar teeth (wisdom teeth) are in natives of the United States very liable to imperfect growth or suppression, and to a degree entirely unknown among savage or even many civilized races. The same suppression has been observed in the outer pair of superior incisors. This is not only owing to a reduction in the size of the arches of the jaws, but to successively prolonged delay in the appearance of the teeth. In the same way men, and the man-like apes, have fewer teeth than the lower monkeys, and these again fewer than the ordinary mammalia, and this reduction has

proceeded in relation to an enlargement of the upper part of the head and of the brain.

The *cause* of development may be next considered, and under this head may be discussed the natural selection of Wallace and Darwin and other propositions of similar import.

EDWARD D. COPE.

THE CENSUS OF INDUSTRIAL EMPLOYMENT,
WAGES AND SOCIAL CONDITION IN
PHILADELPHIA IN 1870.*

BY LORIN BLODGET.

THE social condition of the classes employed in the various industries is the foremost question, almost, in all parts of Europe, and while feeling little direct pressure on this point in the United States generally, we have still had some striking and painful experiences; and we have a general, though vague, expectation that dangers of a serious character await us almost at any moment.

In Philadelphia, however, we have an exceptional condition on more than one point. Exceptional in regard to the extent to which purely productive industry has been developed, and again in the almost entire exemption so far enjoyed from the agitations and conflicts that have occurred elsewhere. We have had no strikes here, strangely enough; and in looking about for cases of antagonism between proprietors and workmen, we can scarcely find an instance. No matter how large or how small the establishment, and we have many of really enormous proportions, there is rarely or never an occasion for difference between employers and workmen. Some of the greater iron works almost approach the coöperative system in the harmony of masters with workmen, and in the frequent exchange of acts of kindness and substantial benefits. Fully a hundred well-known names can be cited, embracing all the larger establishments of the city, with the

*Read before the Philadelphia Social Science Association, April 25, 1872.

same grateful suggestion of generous enterprise on the part of the proprietors, and the same emulation in faithful labors on the part of workmen.

Indeed, I think the evidences strong, that a greater than temporary success has been gained, and something far beyond mere monetary triumphs have been secured. I believe that an era marked by far higher social attainment on the part of those who are employed in productive industries has begun ; that the people not only may be, but have already been, elevated to a position vastly beyond what they have heretofore occupied. I believe that the long existing, and apparently insuperable antagonisms of labor and capital have been shown to be founded in gross mistakes and erroneous systems. Why are we rewarding the prophets of evil with an hourly increasing measure of success, if there is not some landmark already passed in the road of enlightened and intelligent industry ?

If we have, indeed, gained a point beyond which we may not again recede, and have established a condition of prosperity which other nations have not so much as believed possible, we shall justly mark the centennial of our history with a triumph scarcely less than that with which it begun. The liberty of labor, and the power to command with it all the social attainments of our advanced civilization, is quite as practical an achievement as that which gave us political liberty.

There has been possibly too much discussion of industrial questions from the mere point of profit as business ventures, and too ready a disposition to adopt or abandon any principle or practice the moment it was feared that for the time it would not pay. For this reason proprietors in times of temporary depression have been ready to stop work, to abandon the property and disperse the capital employed, when a few months of patience with adverse circumstances would have brought around a new period of demand, and would have saved for productive uses a vast amount of means that in the breaking up of large establishments is inevitably lost ; and while we cannot deny the right of a proprietor to protect himself, we must regard these changes as great social misfortunes.

The highest point to which any condition of industrial development can attain is that which brings the productive workman and

the intelligent citizen nearly, if not absolutely, together—one that in all essentials makes them the same. To most nations this is scarcely less than a dream and a delusion; a result frequently hoped for by enthusiasts, yet practically beyond the limits of possibility. Indeed, in most European countries, it is painful to observe that the line of separation constantly grows broader and more absolutely impassable; the workman in productive labor sinking to a state of helplessness and degradation, and ceasing to be capable of the distinct and independent existence which constitutes a citizen.

But in the industrial development that distinguishes this city and its surroundings, there have always been features of peculiar interest, marking a large departure, originally, from the standard of other manufacturing districts. Starting with greater comparative intelligence, skill and persistence, our people have gone on to create a higher social and civil state, until now it may safely be said that no other community equals—certainly none excels—us in the measure of advancement we have attained above mere helpless, brute, factory labor. And we have really a phase of social science worked out to practical results; one which we may take up and discuss in quite another tone from the usual strain that belongs to manufactures, as elsewhere understood.

I have, as before said, sometimes thought that those who advocate industrial development, or the policy which leads to it, permit the bald monetary question of profits or losses to become too prominent, and to obscure the greater question of social development. When a controversy is supposed to turn on a question whether a manufacturer shall make money, and that nominally at the expense of a trader or a consumer, it is not easy to bring out the proper relation the case has to society as a whole. Industrial development is in fact not a question of division in which one gets what another loses. There is no loss on the part of either trader or consumer, and the gain is shared by every member of society.

To repeat, on reference to aggregates, the simple facts for this last year, 1871, may be roundly stated to be that a city of 800,000 people produced four hundred millions of dollars' worth of actual fabrics, exclusive of all mere sales or exchanges; and that on this mass of fabrics produced, the net profit, in the sense of values realized above the cost for values paid out, was nearly one hun-

dred millions of dollars. This calculation goes a step beyond our exact municipal boundaries, however, just taking in such suburbs as are the city's own, and not including anything belonging properly to any State or county near us. And it also derived from a calculated increase of 20 per cent. in the calendar year, 1871, over the computed production of the census year ending with June, 1870. The footing for that year is, as carefully revised, \$335,000,000, to which, by adding 20 per cent., we have \$402,000,000.

From the most careful examination of the details during the year 1871, and down to the present time, I am clear that this estimate is law, and that for so much as has already elapsed of 1872, the advance over 1870 is more than 25 per cent.

The world, generally, has concerned itself with the profits of mere trade, far more than with the interests and profits of creative industry, and it is thought that wealth increases satisfactorily when a city is made a point through which exchanges pass. We have all this here : of buying and selling merely, and beyond the handling of our own manufactured products over to dealers, we probably conduct a trade of \$500,000,000 yearly. There is a fair profit in it, but it is a profit that the consumer pays, and that comes from some other side ; it is taken from one party or person, in a certain sense, to benefit another party or person. Not so with the values produced here in manufactures. These pay a profit not drawn from the consumer ; it is a created profit, the creation of the active brain and the skillful hand. It is the direct wealth of powers which might, but for such opportunity, have been wholly wasted in idleness. For this reason it becomes conspicuous for the benefits it confers, and it makes itself seen and felt in a thousand forms that are not consumed with the day's demand.

I am not clear as to the most effective mode of bringing out the especial purpose of this review of the condition of our productive industry ; but I propose to cite enough of what I must call, by way of distinction, social facts and results, to maintain the preëminence of this point over the mere money made by the employer, or even by the workman. If we are really founding an era of better relations of labor to the results of labor, let us signalize it as effectively as possible. But if we are merely in the middle of a jolly season of good profits for the employer, and good wages for the workman, to be followed soon by strikes,

poverty, loss and degradation, we, or at least I can speak for myself, are in a state of singular delusion. For our people do not and will not believe that evil impends over them. They will not cut down their expenditures, nor circumscribe their living. For five or six years past they have at intervals been menaced by threats that they would speedily fall into ruin to balance their account of present prosperity, but they have so far been secure.

And is their social state secure, or reasonably secure? Is it one which may continue to exist, and ought to continue to exist?

Is it the natural fruit of good laws, of intelligence, industry, and steady occupation at the work we find to do?

I believe it is. I hold it clear that whatever threatens or wrecks our present prosperity is wrong and outrage. No matter whether from general laws or from social disorders, we ought not to have any worse state; and we ought, on the contrary, to go on to higher and higher social prosperity.

In proposing to present some of the more general results of the industrial census of Philadelphia recently completed, I should, perhaps, explain something in regard to the census machinery, or the conditions under which an account of the facts is taken. It was long since deemed important, next to the mere enumeration of the people, to inquire into their social condition, their occupations, and modes of living. At present there are several schedules, as they are called, other than those of mere enumeration of persons, the two more important of these being described as, No. 4, *The Products of Industry*, and No. 3, *The Products of Agriculture*. In 1860 these constituted so large a mass of returns, as to make a quarto volume each, and that of population being another, there were three volumes of statistical results. It is significant that these two alone, of business pursuits of the people, are raised by the fundamental law of the census into great social importance. There is no inquiry into ordinary mercantile pursuits, whether in buying and selling at home, or in importation from abroad. Our manufacturers have sometimes thought the government inquisitive beyond reason in requiring this return of manufactures, but there is in this very demand, an acknowledgment of the higher position of the pursuit itself. The inquiries are made because the facts are essential to the public welfare. What is produced, either from the

soil or from the hand of skilled labor, is in a great degree a creation, so much absolutely added to the national wealth.

Much difficulty has existed in obtaining correct and full returns of manufactures, because of the real or supposed trenching of the necessary inquiries on the seclusion of business which is often indispensable to success under the sharp competition of modern processes. The schedule inquires, first, into the capital invested, next, the kind of power employed, the number and power of steam-engines, and the number of distinct pieces of machinery. Next the number of persons employed, men women and youths; the aggregate of wages paid, the quantities and value of raw material used, and the quantities and value of manufactured products. All this, however, is applied only to establishments manufacturing more than \$500 in value within the year. So that many thousands of dollar's worth of articles may be manufactured in families or elsewhere, where the value is less than \$500, without being taken into the account.

All this work is done through the United States marshals, by special assistants temporarily employed for that purpose, and not by persons appointed by, and responsible to, the census office itself.

I will not stop to speak of the imperfections necessarily belonging to the present census system, since by special efforts they have been almost completely surmounted so far as this city is concerned. The whole system is absolutely inadequate to the importance of the desired result, and to the vast development of the last decade particularly. The country has grown, industrially, to much more than twice its magnitude ten years ago, and it has become almost impossible to show the full proportions of its importance through the inadequate machinery of the old census laws, simply because of this magnitude, and of the elements of competition and business energy infused into every branch of industry.

And as to forms themselves, and the precise inquiries to be made, there is something needed in the enlargement of what relates to the social state of those employed—more full details as to age and sex, and as to the wages paid for different grades of skill. The present schedule only divides the employed into three parts—first, *men*; next, *females*; and lastly, *children and youth*—being those of both sexes under fifteen or sixteen years. The wages are required only in the aggregate, including everything paid as wages.

for the year. Further statistics are necessary to trace the family relations of the employed, among which should be the number of heads of families, the number of full workmen not heads of families, the number of those not skilled or full workmen, yet above the age of boys. And so of the females. At present most of this desired information can be obtained in but few cases, and must be inferred or estimated for the remainder.

I repeat, as an explanation of the difficulties and imperfections of the present census, that every department of active competing business, whether in manufacturing, or simply in selling, involves great labor and delicacy in the merest attempt at a census. It is business of the most driving and urgent sort to the proprietor, and he cannot afford to risk anything by throwing its reserve aside, and opening it to the exact knowledge of the curious or competing. While some needless solicitude exists on the part of proprietors, there is still the reserved right which no one can dispute; and care must, therefore, be taken in framing the inquiries of a census, so as not to ask too much, and by that means to merely get refusals or misleading statements. We have nothing to do with the profits of the proprietor, and, indeed, little concern with other matters than the facts that relate to the social condition of the employed, and the aggregate of values produced.

On this point it is doubtful whether the new census law, so much hoped for to take the census of 1870, but which finally failed of enactment, did not go as much beyond proper limit as the old or existing law falls short. We have yet to see exactly how the present law has been enforced, and whether it has not been evaded, simple and few as its inquiries were. Indeed, I am informed that in some cities the want of care in preserving the information given from what may be called individual publicity, reduced the return to little more than half the true account. This is the reason given, by proprietors at least, for deficient aggregates of the production they are really interested in making generally known in the aggregate. If one-half of the iron product of this city, or of Pittsburg, for instance, should fail to be included in the census return, a public injury would be the consequence; yet want of care in protecting individual statements might force proprietors to withhold, in simple self-defense, what is so valuable even to

themselves in the summaries which fix the character and credit of a manufacturing city.

In considering, as has been suggested, the proper duty of this city to make its exact position known on the occasion of the centennial celebration, this question becomes important. Shall a new census be taken; and if so, how shall it be done? I am not prepared to answer for myself, further than to say that no greater fulness of detail as to business matters is desirable than is now provided for in the United States census; but all facts relative to specific wages, age, social condition, etc., of persons employed, might be given much more fully and with great advantage to ourselves. There is nothing on these points that will not greatly credit and benefit us to make fully known. We have no poverty or suffering to disgrace us; no concealed enmities of employers and employed to endanger the security apparent on the surface. There are no crowded tenement houses to represent inability on the part of the employed to become citizens; none of the unsettled aggregations of mere laborers, who drift about as employment is attainable in one place and fails in another.

Though reluctant to attempt classifications on the imperfect details of the present census as to the social condition of persons employed, it may perhaps aid further inquiry to make some estimates based only on the best judgment I have been able to form after a year of observation. We may assume that our productive industry now employs 100,000 men and 40,000 females; these figures being but little in excess of the exact summaries for the census year (which are 92,112 men, 35,478 women, and 10,286 boys and girls). Of these perhaps one-fourth of the men are heads of families, and one-eighth are minors under 21 years. Of these minors, more than half do full work and draw full wages, leaving 5,000 or 6,000 to be properly described as boys, generally at half wages. The largest number is of unmarried, or non-householders, if married; and from 20 to 30 years of age. Heads of families may be said to average fully \$3 per day in wages, or \$18 per week; the next, or greater class, average \$2.50 per day, or \$15 per week, and the minors \$2 per day.

In female labor the estimate is not so easy. The proportion of married women is not more than one-eighth; of the next class, being grown girls or young women, or at least without families,

the proportion is largest, but there is little difference in wages. The younger class are more numerous than the males, there being, of young girls at half, or little more than half, wages, not less than 6,000 or 7,000.

And as to the family relations of all these, it is probable that few families are dependent on the wages of one person, on the man or on any other member, for subsistence. The average is at least two. And I think it may be assumed that every household of five persons has—as an average, of course—one of its members at \$10 to \$12 per week, and one at \$15 to \$18 per week, the total of resources being say \$28 per week.

I refer to these estimates to show how definitely we may account for the prosperity of the employed classes, if we could obtain a census of exact details.

Again, it should be said, that all this is confined to manufacturing industry alone; all other employments being out of the scope of the present inquiry. A rough estimate would give numbers *employed at wages in all other pursuits* at about three-fourths of the numbers employed in manufacturing industry, and their social condition, on an average, nearly the same.

I am in doubt whether in proceeding to illustrate the results of our census it would be acceptable to you to go into full statistical details, and to recite the lists of classes with the aggregates of capital, machinery, persons employed, wages and results in manufactured values for each. For myself, I am fatigued with the mere figures, and would prefer only to show you how formidable they are; summing up at the end of this paper two or three condensed tabular statements of wages paid in the several employments and to the several classes, of age, sex and skill, so far as I have been able to separate them.

And for the totals of production, after citing a few from the preliminary publication before use, I will refer you to a condensed table here attached, and to the full census when corrected and issued.

It has been suggested that some comparison of the manufacturing production to the import trade be made here, and while I do not undervalue importation by any means, it is proper that the relative magnitude of the two interests should appear. For the fiscal year ending June 30, 1870, which is identical with the cen-

year, the imports of Philadelphia from foreign countries were \$14,500,797, at gold value, to which add one eighth, would make \$16,313,397 in currency value. Our manufactures for the same year reached \$334,852,458 in value, or *twenty and one-half times the amount of imports*. Clearly, on the score of magnitude alone, we must accredit our manufacturers with a respectable position in the business interests of the city.

One of the most important of the points I wish to bring to your attention is the very great diversity of industries, and the completeness of the representation of the wants of a highly organized social state, and a rich and prosperous people. The power to consume and the power to produce, are alike and equally striking. In fact, they always go together, and here is to be found the key to much error of national policy, particularly in European States, where the amount, or proportion of wages paid to productive labor, is thought to be the least of national concerns, so that the laborer is not a pauper.

No adequate discussion of the true relation of wages to national prosperity has yet appeared, but I venture to assume that no other single fact has such permanent and overruling importance; nothing is so vital to the prosperity and endurance of a highly advanced nation, as that the productive industry of its people shall be fully employed, and at the same time liberally paid. To be fully employed, for the time, at wages merely sufficient to maintain existence on the part of the employed classes, is to place its interests on the very border of a gulf of disorder and of suffering. Strikes, famines, spasms of great production, alternating with intervals of no production at all, with many other evils, are but the ordinary and constant attendants on a state in which labor is paid the smallest pittance of wages.

Of course such labor cannot of itself consume anything of consequence. Markets are therefore to be sought and found outside of its circle, and away from the nation itself, probably. Diversity is not to be developed except by accident, and the nation or people who so occupy themselves, that is, in manufacturing for foreign countries, are not represented in their products, as we may say. What they do bears little direct relation to what they are, or to what they require.

The point I wish to make here is that in what we do, and in

what our productive industry is, our people are fully represented; the products all belong to what we are, and to what we require. To illustrate: the silk weavers of Lyons and St. Etienne produce rich fabrics, which very few even of their wealthier classes consume as we consume, and the laborers do not consume at all. The laces, the porcelains, the bronzes, the thousand rich and decorated fabrics of France, Belgium and Central Europe generally, go almost wholly abroad or out of the country of production to be consumed. We revel in elegant fabrics of both European and American manufacture, and, as years pass, the central point of skill and taste in many of these fabrics is transferred to our own city, and brought within the immediate reach of those who consume and require them. Of the crude materials for these finer fabrics we are large consumers: raw silk, cashmere, mohair, alpaca, and other luster wools for worsteds; sable, ermine and other furs; Persian lambskins, East Indian pearl shells in large quantities; the bases of all known perfumes; all the fine cabinet woods; immense quantities of fine marbles; minerals for porcelain, with more of gold and silver than any other city of the world consumes in manufactures. In these and many other rich natural products, there is no local market greater than that furnished in this city. And for the reserve of coin which is popularly supposed to lie waiting a return to specie payments, we shall be compelled to look to the melting pots of our artisans; it has been industriously picked up to make watch cases, gold leaf and silver-wares for ten years past, until there is scarcely a dollar of coin outside the United States treasury and a small stock held by the banks.

We are, therefore, not great in iron, coal and petroleum alone; nor in the useful arts as distinguished from those of skill and elegance. We are, as I believe, symmetrically developed, and are prosperous and fortunate in all the relations of employed labor to society because of this symmetry.

It has been my duty and my choice to give a very large share of attention for fully fifteen years past to the actual state of productive industry in Philadelphia. I made a very thorough examination of it in 1857, and again an exact and careful one in the census of 1860-1861. And finally, in the census of 1870-1871, I have devoted more labor than I can well explain to the verification of the statistical details of the recent census. These statis-

tical details should, as I have said, be accompanied by all attainable facts bearing on the social state of those employed; particularly the wages paid, the manner of living, and the measure of education and intelligence that prevails. Nothing less than personal observation can show all these conditions fairly, and no mere statistical aggregates can tell the whole story of social growth.

First, however, to use the simple aggregates of numbers for some part of the illustration, and taking the department of productive industry alone, we find that there are 9,000 employers, or proprietors, and very nearly 140,000 persons employed at wages. The year's wages exceeds \$62,000,000, which is, excluding the holiday season, about one and one-quarter millions per week. This account of wages is surprising beyond that of the numbers employed, and in comparison with a total of \$27,000,000, only, paid as wages in 1860, it marks a great advance. The increase of numbers employed is but one-third, while the wages paid are more than double. In this account of persons employed and wages paid there are some qualifications that should be explained: First, that the account embraces shifting items of detail, in the coming in and going out of individuals, the extinction and renewal of firms, and the want of absolute completeness in the canvass itself. In many cases the persons engaged, both as proprietors and workmen, in a manufacture are all enumerated, although the proprietors of course receive no wages. The result in my judgment is, that the numbers employed are more fairly reported than is the aggregate of wages paid—which is never more than full for any one establishment and is often short returned, or wholly absent—and I would add two or three millions for such omission to represent the actual receipts of wages in all the departments of manufacturing industry. In 1860 an entirely full return would have been about \$28,000,000, and in 1870, about \$65,000,000.

Comparing these amounts of wages with the aggregates of manufactured values, we find them each about twenty per cent. of the production, which is a fair proportion, and justifies the amending of the wages return for 1870, as proposed. A low grade of manufacture, or one where little steam-power is employed, calls for 35 to 40 per cent. of the product to be paid in wages, while a very valuable material and a high steam-power used in manipula-

tion, may reduce the proportion of wages to 15 or even to 12½ per cent.

The more striking features of diversified skill with liberal compensation are presented in the employment of females, and here even more decisively than elsewhere is the occupation associated with the best evidences of advancement above the grade of factory labor. Even in the great establishments devoted to textile fabrics, cotton, woolen and silk goods, the standard of personal character is high, and is rapidly advancing in many departments, and in none retrograding. The arts of design, and the invention and construction of patterns for prints, for jacquard loom-weaving in shawls, carpets, fancy woolens, braids, ribbons, embroideries, etc., are sedulously cultivated in a hundred establishments; and are already developed to a degree far beyond the public belief.

In one conspicuous establishment the engraving of printing rollers is conducted by highly skilled and amply paid female hands. In several establishments of this class, that is, print works and weaving factories, designs for printing and weaving are originated, and the products of their skill are far less frequently seen by our own citizens than by the people of other cities and even of distant States; it being a peculiar feature of our industry that the most extensive lines of these goods are sent to New York for distribution, and are consumed by the inhabitants of other and chiefly of the Western States.

Again, in the fine and decorative arts; in painting, engraving and photographic work; in chromos and color painting; in drawing and paper decoration, there are high grades of skill developed. The arts of embellishment are most successfully practiced on thousands of articles, even on those usually described as articles of use rather than of ornament—lamp-shades, fire-screens, printed cards, and a thousand that might be enumerated. For nine-tenths of all that beautifies and interests us in this useful class, as well as in finer and more artistic fabrics, we are to credit our own people, and not foreign countries, or distant cities in our own country. And in all this, female labor finds fair wages and pleasant surroundings. Bank-note and stamp printing belong in the same category, and this may be cited as an instance in which private business establishments pay very nearly the highest wages which are paid in the United States treasury or the United States

mint. It is skill, trustworthiness and intelligence that command this remuneration ; such skill as belongs directly to productive industry also, and constitutes a part of that general elevation of the standard we are considering.

The vast extension of the manufacture of light articles of hand-woven and knitted fabrics of wool, worsted, cotton and silks, affords one of the largest single department of attractive employment to females. Including silk trimmings, fringes, etc., the census shows that 4,000 females are directly employed at productive labor alone, exclusive of those who sell these articles in stores. Nearly nine hundred of these are employed on silk, or silk-mixed goods, including upholsterer's cords and fringes. Many of these being young, the average of wages is not high ; it ranges from \$4 to \$20 per week, the average, including a large number of young persons, being about \$7, or \$350 per year ; and the total sum paid as wages approximating \$1,400,000 per year. Adults here earn an average of \$10 to \$12 per week, or \$500 per year. In view of the light and pleasant character of the work, its cleanliness, and tastefulness, inducing habits of person and of character corresponding in these respects, it is one of the most gratifying evidences of the social advancement belonging to our well-rewarded industries.

Next to this, perhaps, the lighter departments of clothing deserve notice : collars, cloaks, millinery, dresses, shirts, etc. The number of females employed here is not less than 3,800, and their wages are higher, as well as the standard of skill superior. They receive an average of \$9 per week, or \$450 per year, and earn an aggregate of \$1,700,000 in the year. A very large number not wholly occupied with manufacturing, but selling also, as hundreds are who are engaged in millinery, dressmaking, and clothing establishments, have not been recorded in the census, and are not here included. They earn as much, though not always in the form of wages received ; and, as a class, they are pleasantly situated and well remunerated. The very general practice of uniting in one establishment the manufacture and the sale of light articles of this class, increases the number of small proprietors, and greatly benefits all.

In heavy clothing, woman's work is more rough and severe. The number returned as in this employment is very large, 5,954 ;

but the account of wages is not so easy to obtain, all being done as piece work, and the great majority working at their own homes for proprietors who give out the work. Not being constant or continuous, this labor is probably paid not more than \$6 per week; it fills up the unemployed time of a woman who has household duties on her hands also, and it is an adjunct of the means of living of a family, rather than the principal means. But we see that fully \$1,750,000 per year is added to the earnings of females from this source.

In boot and shoe making a peculiarly favorable condition now exists for female employment; and the numbers so engaged are about 2,500. The finer kinds of shoes and boots for children and ladies are most extensively made here, a single establishment often employing 250 to 300 females, with as many males. The work is greatly changed for the better, as regards taste and even elegance, and the hundreds of girls and young women leaving one of these establishments at six o'clock would, from their dress and demeanor, be supposed to come from a school or lecture room, rather than a factory. I have seen with peculiar pleasure these incidental evidences of their pleasant and improved condition on many occasions, and have shown them with pride to strangers accustomed to the low standard of personal appearance and character belonging to European establishments of a like grade. The average wages are here \$7 per week for females; \$350 each per year, and \$875,000 in the aggregate.

The umbrella and parasol manufacture has not been included in the previous statements. It employs over 1,000 females, and pays nearly \$8 per week, or \$400,000 in the aggregate. The standard of taste and skill is here generally high.

In factory work more distinctively, or in mills with power-looms, on cotton and woolen goods, the number of females employed is very large; about 8,000 being directly employed in such factory work, and not included in the preceding summaries. But even this grade is far in advance of the condition it presented in 1860. Power-loom weaving, spinning, winding, etc., are of course not so cleanly employments as those above named, but the opprobrious title of "factory girls," formerly much employed, and really descriptive of a less self respecting class, is now rarely heard, and still less rarely deserved. The wages paid are fair,

and even higher than in other classes, they range from \$7 to \$14 per week, and average fully \$9 for the year and \$10 for the time employed. A large share being piece work, and one person attending two looms, the work drives a good deal, and much is earned when at work. At \$475 per year the 8,000 employed, earn \$3,800,000 in the aggregate; a large sum, but only a small share of the total value of textile fabrics of every class made in the city, which reached the enormous sum of \$58,500,000 for the census year.

I might go on at great length in citing details of large employment and liberal compensation for productive labor of this class, and there is nothing more satisfactory to present as evidence of the high degree of development which our industry has attained. The introduction of steam machinery, and of various superior processes of manufacture, greatly favors the employment of intelligence, as contrasted with mere brute strength. Take the commonest factory labor, and one young woman now attends two power-loom; weaving 10,000 yards each of dress goods per year; where formerly one person of greater physical strength, attended one hand-loom, weaving not more than half as much each per year, or one-fourth as much in all. Generally the improvements of the past fifteen years have fully doubled the productive power of every person employed, and what is better, have enlarged the basis of employment so that twice as many can be effectively employed.

The proportion of young persons now employed, and the wages paid them, form the least satisfactory part of our statistical returns under the census. It was required, by the terms of the law, that all under 16 as males, and under 15 as females, should be entered as a separate class; described on the forms as "children and youth." This was, however, very imperfectly complied with, and no distinction of sexes was made of those so entered. I have thought it safe to assume that the number of boys and girls was nearly equal, and that the footing I make of the totals at 10,286 is approximately correct. There are 5,000 of each, in round numbers, therefore, who are minors in fact, or less than adults in skill as well as in years, and receiving less wages. Indeed, there are some two or three thousand more who are partially employed, as it may be said, and are earning little or even

nothing at regular wages, because they are learners. Generally, however, quite young boys or girls get \$2 to \$3 per week, if living at their own homes; and for all these minors an average of \$3.50 per week would be nearly correct. For a year, with its frequent interruptions, the total earnings must be put at less than \$3.50 for the whole number of weeks, yet at \$3 average, for fifty weeks, and 10,000 employed, the total compensation paid is \$1,500,000.

Much has been recently said and written in regard to the premature employment of children and youth in manufacturing establishments. It is certain that legislative restriction has been necessary in England, and in Massachusetts, Rhode Island, and perhaps other States. But so far as my personal observation goes, no such necessity exists in Philadelphia. It is rare that grinding poverty compels premature employment, and when employed, these half-grown persons or children are at light work, and with interruptions for some months of every year. I have seen few cases in which want of education or personal degradation became apparent, and many instances exist in which our conspicuously honorable proprietors of extensive works take especial pains to favor education, and all proper relaxation on the part of those employed by them. The names of Bullock, Dobson, D. S. Brown, Campbell, and many others in textile fabrics, ought not to be passed without mention; and it only needs the experience of a visit to the hundred magnificent mills in and near the city, to assure any citizen that we are already far above the low level to which the employed children and females of other countries have fallen. This result is chiefly due to the high and resolute character of the proprietors, who prefer to fight their way to success with the aid of their work-people, and not in antagonism and hostility to them.

And finally, as to the heavy work of manufacturers, the work and wages of men only, the same general amelioration exists. As I have said, there is nothing heard of strikes, or of hostility between proprietors and workmen. There are 92,112 adults, or full men, in the lists of persons employed at wages in manufacturing pursuits in this one city; a productive force really enormous, working as it is with over 2,000 steam-engines, of the aggregate power of 50,000 horses. Almost unconsciously to most of our

citizens, this vast machinery does its daily work, making fabrics of iron, wood and textile fibers largely exceeding one million of dollars in value for every working day in the year. If these ninety thousand men, officered by their ten thousand proprietors, were to defile through our streets in military order, they might convey some adequate impression as to the power we so little regard, and if their daily work, or one day's work of them all were set out in due order as one of the parts in the centennial exhibition, it would be admitted that this city had the right to leadership in that great event.

As to the wages paid adult men in the year of the census, it was not practicable to separate either the details or the aggregate from the general account of wages. Formerly men were paid twice as much as women; now the proportion is as three to two, probably. Wages fell somewhat heavily in 1868 and 1869, from the high figures of the war, but since 1869 they have advanced rather than receded further. Many classes are paid \$21 per week or \$3.50 per day; many other classes more than this, and skilled persons at piece work earn even \$5 and \$6 per day. Mere laborers of course decline to \$12, \$10, and \$9 per week, which last is the lowest rate paid to any laborers assuming to do a man's work. All skilled labor is really high, showing that the door is open to a scale of wages affording abundant means of living, to all who have the capacity to work with skill at all.

And as to the mode of living, it is generally true that skilled workmen live in their own houses, or, at least, in single houses; that they maintain their families with ease, and that education, with all the accompaniments of personal comfort, are secured to their children. There is little or no living in rooms, or in tenement houses, except on the part of some wholly unskilled laborers. This city is conspicuous for its great number of dwellings of abundant neatness and comfort, owned and occupied by single families whose whole maintenance is from manufacturing industry. And these houses, if rented, pay \$15 to \$25 per month, and, if owned by the occupant, taxes, interest and other expenses represent a close approach to the same annual expenditure. That all this, with the current cost of living and the frequent expenditures for other than mere necessities, is easily borne by our mechanic and workman,

is sufficient proof that his resources from wages are comparatively ample.

I should be glad to be able to make a more exact analysis and illustration of the specific products of industry here than I find I have time or space to do now. The lead is taken in textile fabrics: cotton, woolen and silk goods, which we produce to the enormous aggregate of \$58,500,000. Next are iron and steel manufactures, \$40,800,000 in value, exclusive of a great variety and large aggregate of other metals, and of manufactures of iron with wood, as wagons, carriages, implements, etc., usually classed as half iron.

The literary industry of the city, in books, newspapers, etc., is \$12,710,000 in monetary value; while books alone are \$4,500,000.

On every side, in fact, we are met by footings of value so large that they startle us in comparison with the bald and meager returns of industry elsewhere. The clothing manufacture is \$16,210,000 in value; that of boots and shoes, \$10,700,000. Perhaps this last named has more rapidly advanced within the last decade than is generally supposed. The McKay sewing machine, by which soles are sewed on in an instant, and far more securely than by hand, has greatly improved the manufacture of shoes and boots for the trade. And not only are both boots and shoes far better and more durable now than in 1860, but their price is even less. Skill, capital and improved machinery have won especial triumphs in this department, not less than in so many others.

I hesitate how definitely to refer to the many triumphs of our manufacturers in special products, in fear that I may trespass on some of the proper rights of reserve belonging to industries often contested between us and Europe; but I may say generally that at least fifteen or twenty leading articles, in which the values made here now exceed half a million dollars each, yearly, have been won in the last ten years absolutely as against foreign competition, and that the markets of New York, as of all other cities of this country, take now no other than our own supply, sent from Philadelphia manufacturers. In woolens and worsted goods this is most conspicuously true; but in iron, steel, machinery and other products of the most diverse character there are frequent instances. The establishment of a new industry in this manner, to take the place of important articles previously wholly imported, is a feat of

generalship, courage and perseverance, worthy to crown its author with knighthood. I know several such in which, singly, the saving to the country counts millions already; and this saving is not only on the aggregate sum previously sent abroad, but on the price in detail to the consumer. In almost every case the present price is far less, and in several known to me it is only about half that which the article bore when wholly imported.

This important fact is too little observed by the public generally. Every established industry has saved us largely in present prices, exclusive of its thousand other benefits; and every new one founded and made successful, cheapens to the consumer the article it produces. With the principles concerned I do not propose now to deal, but the facts I am bound in duty to state as I find them and refrain from using the illustrations I find to my hand only; for the reason that a census to be faithful must be confidential, and the confidences of a proprietor I cannot violate.

It is often supposed that the industrial production of the country is a passive, and to a great degree a helpless interest, without the intrinsic vigor and enterprise which belongs to commercial pursuits. There can be no greater error, at least so far as the new or modern era is represented in our own city. No ventures in foreign trade can exceed the courage, foresight and energy requisite in founding new industries. I had very recently from the lips of one of the most successful of these, who now produces half a million of dollars in value yearly of goods which previous to 1865 were wholly produced abroad, some explanation of the specific risks and losses necessarily incurred in transferring the seat of a great manufacture from Belgium to Philadelphia. Business prosecuted persistently for many months at a foreseen loss of thirty or forty thousand dollars, and investment to the extent of twice this sum in machinery, the cost of which would be wholly lost unless the victory is won, are but illustrations of the risks, and representative instances of enterprise.

For myself I have a degree of respect, and even admiration, for these generals of the army of wealth producers, which I hope may become universal with thoughtful citizens. The bravest and the coolest of those who risk personal ease and accumulated wealth for the attainment of new and greater public benefits, cannot go beyond these men in achievements. Let one not acquainted with those

greater facts enter an iron-mill where the power of eight hundred horses and twelve hundred men is directed to the production of a single description of wrought-iron work exceeding three millions of dollars in value in a year; or, again, where eighteen hundred men and five hundred horse-power, finish a powerful railway locomotive every working-day of the year. In still another giant establishment nearly eight hundred power-looms, with nine hundred attendants, manufacture worsted goods at the rate of ten millions of yards per year; the aggregate value counting as many millions, nearly, as of the iron works first cited. More than twenty establishments exceeding one million of dollars in annual production exist within the city, and at least ten exceed two and a half millions each; the highest closely approaching five millions. At one ship-yard four gigantic iron steamships are now rising simultaneously on the stocks, a product new since the census of 1870, and not included in its figures or in the aggregates I have cited.

In short, if any citizen will make these great facts personally known, he will feel that a power far beyond his previous conception is working around us, not quite silently to him nor yet obtrusively; a power great enough to bear us on in a steady course of prosperity, I trust, at least until the rounded centennial period shall give us opportunity to make its greatness and its national beneficence widely known.

I have purposely refrained as I have before said from burdening you with detailed statistics in this paper. By the great liberality of the census office and its enlightened superintendent, Gen. F. A. Walker, we have been enabled first to perfect the official record itself, and to gather and authenticate all the facts. Now we are also generally permitted to make them public without other reserve than belongs to the proper security of individual establishments; and under this permission a careful and complete tabular statement is nearly ready and will soon be distributed.

In addition to what belongs simply to the forms of return, and the facts there tabulated, I propose to make the most complete statement possible of wages in detail, of the ages and classification of persons employed at wages; the proportion of heads of families, of children, of females, and of other distinctions not

embraced in the official forms. The previous occupation and nationality of the several classes of persons employed; the derivation of industries themselves, and other incidents valuable, if not essential, to a comprehensive judgment of the whole case. The statement of wages paid in a large number of employments I have added as an appendix to this paper.

I may say here, however, that a peculiar assimilation, if not identity, is rapidly being established in the direction, and in the manner of prosecuting the labors of all these works. They are already Americanized, and essentially distinct from and beyond European establishments in all the characteristics of better paid more intelligent and effective labor, and greater results in productive power. One of our great proprietors spent a few months in England recently, visiting the districts and establishments making his own class of goods; and everywhere found defective machinery, unintelligent workmen, and want of improvement very striking in comparison with his own. This contrast in progress is due to the fact that neither man nor master here stops to embarrass the other by needless contests, and neither rests for a moment in a routine of work that he may by any ingenuity or any expenditure improve. The whole body of productive establishments is full of life and progress; new and magnificent structures are daily rising to be filled with new machinery and better forms of labor. A visit to some of these districts would astonish the quiet citizen who sees Chestnut street and Walnut street to the exclusion of the distant sections; the south and south-west, the north, north-east, and north-west are all and alike swelling with a strong and rapid growth of industrial establishments; and these not the traditional factories or mills surrounded with poor tenements, and houses built for employees; but fine structures in external as well as internal management; exponents of wealth as well as enterprise, and surrounded by new, cleanly, and spacious streets and squares, fit for the residence of as many proprietors as there are workmen. The Nineteenth ward is, perhaps, the best representative of this present growth, and I beg to suggest, instead of the hackneyed trip to Europe in which well-to-do citizens indulge, an inexpensive journey three to four miles northward and north-eastward, to a district where the city may be seen to grow.

Again I refer in conclusion to what I have suggested and believed is

the new era of the relations of employed labor to society in general. I claim that this personal antagonism, as the world generally has it, is a fiction or a misfortune, not a necessity. Diversity, skill, intelligence, demand and compensation go together, or should go together. There ought not to be an hour's difference between employer and employed; but if the dead-level of starvation prices is the basis, there can be no rest; if there is no skill and no intelligence developed to be observed and rewarded and to stimulate the workman, there is also no rest or peace. If foreign markets, and contingencies of demand wholly beyond the reach of the proprietor are relied on, there is again great danger; and if, with other things better, with skill, intelligence and demand for products, which are after all not rewarded by such compensation as elevates the workman to the dignity of a citizen, we may be sure that antagonism and silent or open warfare will frequently recur.

Here, however, the greater of all these dangers do not exist. The market is near at hand; prices of products are good; all forms of labor and of direction are well compensated; there is the widest possible diversity of industries, and the keenest intelligence ever ready to make more and better articles, both on the part of workmen and proprietors. However unfortunate or unsuccessful any temporary effort may be, there is no lack of hope or courage; no dead-level of helplessness.

To my view this concurrence of great facts and great benefits should be the profoundest subject of interest to all deserving the name of statesmen and philanthropists. If we can preserve these triumphs of industry, and strengthen and extend them until the century of our national existence is complete, we should then celebrate them with an emphasis and solemnity scarcely less than that which marks our earlier achievement in political liberty.

WAGES PAID IN VARIOUS INDUSTRIES IN PHILADELPHIA IN 1870.

The following statement of wages paid in various manufacturing and industrial employments in Philadelphia, has been carefully revised from information obtained personally in the revision of the manufacturing statistics of the United States census of 1870, and during the entire time elapsing since the census was taken.

During 1871 there was very little change, but in 1870 there was

a decline of perhaps ten per cent. from 1869, and nearly 20 per cent. from 1867. It may be said that the greatest decline in any class of employments, from the high wages of 1866 and 1867, was not more than twenty per cent., and the average not more than fifteen per cent., the lowest point being reached in 1870, and the tendency in the last months of 1871 and first months of 1872 being to an advance.

In steam-mills of every class, and particularly on cotton and woolen goods, wages have been quite regular, not rising so high in 1866 and 1867, nor falling afterward in 1870. Piece work wages which largely exist in the higher departments, and with the skilled workmen, scarcely changed at all. As a rule piece work pays well, reaching, as actually realized, one-third to one-half more than daily or weekly wages.

The general defect of the account of wages is the considerable proportion of unemployed time, and the defect of yearly aggregates, as compared with weekly or daily proportions. A man earning \$20 per week, for instance, should earn \$1,000 per year, yet the books of employing establishments will show but \$800 to \$900 actually paid the man; the difference representing unemployed time, and this usually due to the ease and choice of the workman, rather than to want of work, or stoppage of the mill. The summary of wages paid therefore falls below the weekly or daily detail of payments.

WAGES PAID IN MANUFACTORIES IN PHILADELPHIA, 1870, 1871—MEN.

	PER DAY.		PER WEEK	
Accountants	2 00 to	3 50.....	12 00 to	20 00
Agricultural Implements	2 00 to	2 50.....	12 00 to	15 00
Artificial Teeth.....	1 75 to	3 00.....	10 00 to	18 00
Bakers—Bread and Cake.....	2 00 to	3 50.....	12 00 to	21 00
Basket Makers.....	1 25 to	2 00.....	7 00 to	12 00
Brick Layers (boys and men).....	75 to	3 50.....	5 00 to	21 00
Brick Layers—front.....	3 50 to	4 00.....	21 00 to	24 00
“ “ back.....	2 00 to	3 00.....	12 00 to	18 00
Boiler Makers.....	2 00 to	2 50.....	12 00 to	15 00
Book Binders.....	2 50 to	3 00.....	15 00 to	18 00
Box Makers.....	2 00 to	3 00.....	12 00 to	15 00
Boot Makers, by piece; Cutters.....	3 00 to	3 50.....	18 00 to	21 00
“ Crimpers and Finishers.....	2 50 to	3 50.....	15 00 to	21 00
Brewers, beer and ale.....	1 50 to	3 50.....	9 00 to	21 00
Blacking	1 50 to	2 50.....	9 00 to	15 00
Blacksmiths and Wagon Makers	2 00 to	3 00.....	12 00 to	18 00
“ Helpers.....	1 50 to	2 00.....	9 00 to	12 00
Bolts and Nuts.....	1 00 to	2 00.....	6 00 to	12 00

	PER DAY,		PER WEEK.	
Boots and Shoes—ladies and children	2 00 to	3 00.....	12 00 to	18 00
Brush Makers.....	1 25 to	3 00.....	7 00 to	18 00
Button Makers.....	1 25 to	2 50.....	7 00 to	15 00
Cabinet Ware and Furniture.....	1 50 to	4 00.....	9 00 to	24 00
Candles and Soap.....	1 50 to	2 50.....	9 00 to	15 00
Car Builders.....	2 00 to	3 00.....	12 00 to	18 00
Carpenters and Builders.....	2 00 to	3 00.....	12 00 to	18 00
“ Assistants	1 50 to	2 00.....	9 00 to	12 00
“ Ship and Navy.....	2 50 to	3 00.....	15 00 to	18 00
Carriage Builders and Trimmers.....	2 00 to	3 50.....	12 00 to	21 00
Carvers—wood.....	2 00 to	3 50.....	12 00 to	21 00
Chemical Works.....	1 75 to	3 50.....	10 00 to	21 00
Clothing Cutters.....	3 00 to	4 00.....	18 00 to	24 00
Clothing, Fitters and Sewers.....	2 00 to	3 50.....	12 00 to	21 00
Confectioners	1 50 to	2 50.....	9 00 to	15 00
Coopers	2 00 to	3 00.....	12 00 to	18 00
Cotton Mills, Spinners, Weavers, etc....	1 75 to	3 50.....	10 00 to	21 00
Curriers and Dressers.....	2 00 to	3 00.....	12 00 to	18 00
Cordage Works.....	1 25 to	3 00.....	7 00 to	18 00
Cotton Mills, (skilled).....	\$2 50 to	4 00.....	\$15 00 to	24 00
“ younger or less skilled... 1 75 to	2 25.....		10 00 to	14 00
Curriers of Skins.....	2 00 to	3 00.....	12 00 to	18 00
Cutlers, Clothing, or Boots and Shoes.	3 00 to	4 00.....	18 00 to	24 00
Cutlers, or Cutlery manufacturers.....	2 00 to	3 00.....	12 00 to	18 00
Dental Workmen, on Teeth or Inst's... 2 00 to	3 50.....		12 00 to	21 00
Drivers of Engines, etc.....	2 25 to	4 00.....	13 00 to	24 00
Drivers, ordinary.....	1 50 to	2 25.....	9 00 to	13 00
Dyers	2 00 to	4 00.....	12 00 to	24 00
Engineers, proper in factories.....	3 00 to	4 00.....	18 00 to	24 00
Engravers, Wood, Steel and other.....	2 50 to	4 00.....	15 00 to	24 00
Firemen.....	1 50 to	2 50.....	9 00 to	15 00
Foundry-men, Moulders	2 50 to	4 00.....	15 00 to	24 00
“ Laborers.....	1 50 to	2 50.....	9 00 to	15 00
Gas and Steam Fixtures.....	2 50 to	3 50.....	15 00 to	21 00
Glass Blowers.....	3 00 to	4 00.....	18 00 to	25 00
Glassmakers, other.....	1 50 to	2 50.....	9 00 to	15 00
Glass Cutters.....	2 50 to	3 00.....	15 00 to	18 00
Glue makers, (skilled).....	2 50 to	3 50.....	15 00 to	21 00
Glue Factory, Workmen, other.....	1 50 to	2 25.....	9 00 to	14 00
Gold Beaters.....	2 25 to	3 50.....	14 00 to	21 00
Goldsmiths.....	3 00 to	4 00.....	18 00 to	24 00
Granite Cutters.....	2 50 to	3 00.....	15 00 to	18 00
Grinders and Polishers.....	1 50 to	2 50.....	9 00 to	15 00
Hair Cloth and Hair Workers.....	2 00 to	3 00.....	12 00 to	18 00
Harnessmakers.....	2 50 to	3 50.....	15 00 to	21 00
Hatmakers, (felt and silk).....	2 50 to	4 50.....	15 00 to	26 00
Horse Shoers.....	2 00 to	3 00.....	12 00 to	18 00
Hosiery Mill Works.....	2 25 to	3 50.....	14 00 to	21 00
Iron Work, Puddlers.....	4 00 to	4 50.....	24 00 to	27 00
“ Helpers.....	2 00 to	2 25.....	12 00 to	14 00
Iron Rollers.....	3 00 to	4 00.....	18 00 to	24 00
“ Helpers.....	2 00 to	2 50.....	12 00 to	15 00
“ Nailers.....	2 50 to	3 00.....	15 00 to	18 00
“ Boilermakers.....	2 50 to	3 50.....	15 00 to	21 00
“ Moulders Foundry.....	2 50 to	4 00.....	15 00 to	24 00

	PER DAY.		PER WEEK.	
Iron Foundry Laborers.....	1 50 to	2 25.....	9 00 to	14 00
Ivory and Bone Turners.....	2 00 to	3 00.....	12 00 to	15 00
Jewelers.....	2 50 to	4 00.....	15 00 to	24 00
Jewelers' Assistants.....	1 50 to	2 25.....	9 00 to	14 00
Laborers, general.....	1 50 to	2 50.....	9 00 to	15 00
Lathers.....	2 00 to	2 50.....	12 00 to	15 00
Leather Dressers.....	3 50 to	5 00.....	20 00 to	30 00
Locksmiths.....	2 25 to	3 25.....	13 00 to	20 00
Loom Bosses.....	3 00 to	4 00.....	18 00 to	24 00
Lead Works.....	2 00 to	3 50.....	12 00 to	21 00
Machinists, general.....	3 00 to	3 50.....	18 00 to	21 00
Marble Cutters.....	2 00 to	3 50.....	12 00 to	21 00
Marble Polishers.....	2 00 to	3 50.....	12 00 to	21 00
Masons, stone.....	3 00 to	3 50.....	18 00 to	21 00
Moulders, brick, (piece).....	3 50 to	4 00.....	21 00 to	24 00
Morocco Dressers and Finishers.....	3 50 to	6 00.....	21 00 to	36 00
Morocco Factories, assistants.....	2 50 to	3 00.....	15 00 to	18 00
Music Engravers.....	3 00 to	4 00.....	18 00 to	24 00
Oil Cloth Makers.....	2 00 to	4 00.....	12 00 to	24 00
Oil Grinders and Pressers.....	2 50 to	4 00.....	15 00 to	24 00
Oil Refiners.....	2 25 to	3 50.....	14 00 to	20 00
Painters, House, etc.....	2 25 to	4 50.....	14 00 to	27 00
Painters, assistant.....	1 50 to	2 50.....	9 00 to	15 00
Paintmakers.....	2 00 to	3 00.....	12 00 to	18 00
Paper Mills.....	1 50 to	3 50.....	9 00 to	21 00
Paper Hangers.....	2 00 to	3 50.....	12 00 to	21 00
Pianomakers.....	3 00 to	4 00.....	18 00 to	24 00
Planing Mills.....	2 00 to	3 00.....	12 00 to	18 00
Plasterers.....	2 50 to	3 50.....	15 00 to	21 00
Plumbers.....	3 00 to	3 50.....	18 00 to	22 00
Printers, piece.....	3 00 to	5 00.....	18 00 to	30 00
Printers, Press and Assistant.....	2 50 to	4 00.....	15 00 to	24 00
Roofers, piece.....	3 00 to	3 50.....	18 00 to	21 00
Roofers Assistant.....	2 00 to	2 50.....	12 00 to	15 00
Rope Works.....	2 25 to	4 00.....	14 00 to	24 00
Saddlers.....	2 50 to	3 00.....	15 00 to	18 00
Sash and Doormakers.....	2 50 to	3 50.....	15 00 to	21 00
Ship-smiths.....	2 50 to	3 00.....	15 00 to	18 00
Stair Builders.....	3 00 to		18 00 to	
Shoemakers, piece.....	3 00 to	4 50.....	18 00 to	27 00
Shoemakers, assistant.....	2 00 to	2 50.....	12 00 to	15 00
Silversmiths.....	3 00 to	4 50.....	18 00 to	27 00
Silver Platers.....	2 00 to	3 00.....	12 00 to	18 00
Soap-makers.....	2 00 to	3 00.....	12 00 to	16 00
Spike-makers.....	2 50 to	3 00.....	15 00 to	18 00
Stone Cutters.....	2 50 to	3 50.....	15 00 to	21 00
Upholsterers.....	2 00 to	3 50.....	12 00 to	24 00
Weavers, (piece).....	2 50 to	5 00.....	15 00 to	30 00
Wool Sorters.....	3 00 to	3 50.....	18 00 to	20 00

WAGES OF FEMALE LABOR IN PHILADELPHIA, 1870, 1871.

	PER DAY.		PER WEEK.	
Accountants.....	\$1 75 to	\$2 75.....	\$10 00 to	\$16 50
Album Fitters.....	1 50 to	2 00.....	9 00 to	12 00
Artists Colorers.....	1 75 to	2 50.....	10 50 to	15 00
Artificial Flower Makers.....	1 00 to	3 00.....	6 00 to	18 00
Artificial Teeth Makers.....	1 50 to	2 00.....	9 00 to	12 00
Bakers, cakes, etc.....	1 50 to	2 00.....	9 00 to	12 00
Bedding and Upholstering.....	2 00 to	2 50.....	12 00 to	15 00
Blacking Packers.....	1 00 to	1 50.....	6 00 to	9 00
Blank Book Makers.....	1 25 to	1 50.....	7 50 to	9 00
Book Binders.....	1 25 to	1 50.....	7 50 to	9 00
Bonnet Frame Makers.....	1 00 to	1 75.....	6 00 to	10 50
Bonnet Finishers.....	2 00 to	2 50.....	12 00 to	15 00
Boots and Shoes, ladies and children..	1 00 to	2 50.....	6 00 to	15 00
Boxes, of Paper.....	50 to	2 00.....	3 00 to	12 00
Braid Weavers.....	1 00 to	2 00.....	6 00 to	12 00
Brush Makers.....	1 00 to	2 00.....	6 00 to	12 00
Button Makers.....	75 to	2 00.....	4 50 to	12 00
Canned Fruits.....	75 to	2 00.....	4 50 to	12 00
Cap Makers.....	75 to	1 75.....	5 00 to	10 00
Card Packers.....	1 00 to	1 75.....	6 00 to	10 00
Carpet Spoolers and Winders.....	1 50 to	2 50.....	9 00 to	15 00
Chemical Works.....	1 00 to	2 00.....	6 00 to	12 00
Clothing Makers (piece work chiefly)..	1 00 to	1 50.....	6 00 to	9 00
Collars and Shirts.....	1 00 to	2 00.....	6 00 to	12 00
Confectioners (packing).....	60 to	2 00.....	3 50 to	12 00
Corset and Shirt Makers.....	1 00 to	2 00.....	6 00 to	12 00
Cotton Goods Weaver's.....	1 50 to	2 30.....	9 00 to	14 00
“ “ Spoolers, etc.....	75 to	2 00.....	4 50 to	12 00
“ “ Print Works.....	1 00 to	2 50.....	6 00 to	15 00
Drugs and Medicines, Packers.....	1 00 to	2 00.....	6 00 to	12 00
Engravers and Printers.....	1 00 to	2 00.....	6 00 to	12 00
Envelope Makers.....	75 to	1 50.....	4 50 to	9 00
Furriers.....	1 00 to	2 50.....	6 00 to	15 00
Gold Leaf Packers.....	1 00 to	2 00.....	6 00 to	12 00
Gold and Silver Coinage.....	1 50 to	2 00.....	9 00 to	12 00
Hair Cloth Weavers.....	1 50 to	2 00.....	9 00 to	12 00
Hair Workers (human).....	1 00 to	2 00.....	6 00 to	12 00
Hosiery, Cotton.....	50 to	2 00.....	3 00 to	12 00
Hosiery, Woolen.....	75 to	2 50.....	4 50 to	15 00
Map Colorers.....	75 to	2 00.....	4 00 to	12 00
Milliners and Straw Goods.....	1 00 to	2 50.....	6 00 to	15 00
Morocco Leather.....	1 25 to	1 50.....	7 00 to	9 00
Neckties.....	1 00 to	1 75.....	6 00 to	10 00
Paper Mills.....	1 00 to	1 75.....	6 00 to	10 00
Paper boxes and bags.....	50 to	2 00.....	3 00 to	12 00
Perfumes and Cosmetics.....	1 00 to	2 00.....	6 00 to	12 00
Printers—Job and other.....	1 00 to	2 00.....	6 00 to	12 00
Seed Packers.....	50 to	1 75.....	3 00 to	10 00
Segar Makers (by piece).....	1 00 to	1 75.....	6 00 to	10 00
Shawl Weavers and Makers.....	1 25 to	2 25.....	7 00 to	14 00
Shirt Makers.....	1 00 to	2 00.....	6 00 to	12 00
Shoe Fitters.....	1 25 to	2 00.....	7 00 to	12 00
Silk Ribbons, Fringes, etc.....	75 to	2 50.....	4 50 to	15 00
Silk and Worsted Dress Goods.....	1 00 to	2 50.....	6 00 to	15 00

	PER DAY.		PER WEEK.	
Silver and Plated Ware.....	1 00	to 2 00.....	6 00	to 12 00
Soap Packers.....	75	to 1 50.....	4 50	to 9 00
Umbrellas and Parasols.....	75	to 2 25.....	4 50	to 14 00
Upholsterers' Goods.....	1 00	to 2 00.....	6 00	to 12 00
Webbing and Tape.....	1 00	to 2 25.....	6 00	to 14 00
Window and Lamp Shades.....	1 25	to 2 00.....	7 00	to 12 00
Woolen Manufacturers.....	1 00	to 2 50.....	6 00	to 15 00
Worsted Manufacturers.....	1 25	to 2 50.....	7 00	to 15 00

THE PHILOSOPHY OF THE FRENCH REVOLUTION.

BY PAUL JANET.

Translated from Revue des deux Mondes, by O. H. K.

THE THEORISTS OF THE REVOLUTIONARY IDEA.

II.

SUCH were the ideas of the constitutional school: it repudiated the violence of the Revolution, and abandoned it almost at the outset, some during the days of October, and others on the 14th of July; but the whole school agreed in maintaining that the *ancien regime* merited its fall, and that it should never, by any means, be reëstablished. Such were also the views of the liberal school under the restoration, one part of which pushed them too far. That was the time, on the other hand, when two young writers, since illustrious, bound together by friendship, and by common opinions and studies, undertook to give us, the first the grand epic poem, the other, the strictly detailed account of our Revolution. MM. Thiers and Mignet, both belonging to the liberal party, both them in the first heat of youth, and both of whom have imprinted on their histories the spirit of their age and time. They have, indeed, rarely mingled abstract opinions and theoretic views, with their recitals of facts, and do not seem to have aspired to a high philosophy like those who have followed them. They have not introduced their works with two or three

dogmas, nor brought in authority, equality, liberty and fraternity, those abstract personalities which make certain histories resemble a Hegelian drama; they have been, and have not wished to be, more than historians; but their history has, nevertheless, a spirit, a train of thought and an object, which was the defense of the Revolution, its justification, and perhaps, even, its glorification. They approve of and defend it even in its most terrible and extreme moments. Severe on its crimes, and never offending pity and humanity, they plead the cause of their country, in whose hands soever it was; while they condemn the terrorism of the Jacobins they do not disapprove of their dictatorship, and leave the impression that it was important to the safety of France. These bold views, presented with an easy moderation and vivid description, had an immense influence. France, which loved the Revolution, was delighted to learn that she had not been so far wrong as she thought, and rejoiced to be able to admire something, even in what she hated.

Whatever exaggeration there was in the works of these brilliant writers, is easily explained by the time when they wrote. It was then established in the governmental councils, and in the salons of the dominant party, that the Revolution was nothing but a great exhibition of crime and folly; that France had been drunk for twenty-five years, and must be brought to reason. Such was the language of our moderate royalists. It is easy for us, in our day, to be cool and impartial in reference to the French Revolution; but if we transport ourselves to those days of struggle, if we stand face to face with the foolish passions of the *émigrés*, with their continual insults to New France, their demand for the reconstruction of a royal and aristocratic France, in which twenty-five years of our national existence should be blotted from the memory of man, we shall be better able to understand the strong feelings of the opposite school, feelings which our two historians have not always avoided in their bold and able defense of the Revolution.

If it is true that a great part of the faults of the Revolution is due to the want of political experience in the constituent assembly, and the blind passions of the revolutionary party, we must not forget the measure of responsibility belonging to the court and the *émigrés* in the deplorable events which followed. This

responsibility dates from before the Revolution, and is rendered greater by it, for if it is difficult, not to say impossible, to limit a revolution already let loose, who shall dare to say that it could not have been prevented by wise and timely reforms. How, without despising what was done by Turgot and Malesherbes and by Necker himself; who does not know that it was the opposition of the courtiers which brought about the fall of these wise ministers; who does not know that the court always opposed the reduction of expenses, that those who were privileged always refused the equality of taxation, and that the parliaments themselves put obstacles in its way. Who does not know that as early as the 14th of July the first emigration began, the *Comte d'Artois* giving the example of a prince of the blood running all over Europe to beg for aid against his native country? And if we must deplore the days of October and the 14th of July, the first of those *coups de force*, which were later to be so multiplied, do we not also know of the imprudences of the court which provoked these disorders? If we can believe in the sincerity of Louis XVI., born, as M. Mignet says, to be a constitutional king, must we believe in that of Marie Antoinette, doubly imbued with despotic ideas, both as princess of Austria and Queen of France? If, lastly, we must regret that wise constitutional ideas did not predominate in the constitution of 1791, do we not know that the "right" joined the "left" in frustrating all moderate ideas? And to these provocations from within were joined that from abroad in raising the Revolution to such a height of crime and power. In fact, France by its continental situation has the privilege that nothing that happens at home can be indifferent to other nations; a change of society in France is a change of society throughout Europe, and consequently interests all the states. Some say that France was not really* menaced by Europe; but it matters little whether she believed herself to be threatened, or was so really, as in either case she must, for her own safety, resolve to take the offensive to prevent being surprised. But were there not *émigrés* on the frontier, a camp at Coblenz, and princes seeking everywhere for allies against their country? France was completely surrounded by enemies.

* This is asserted by the German historian Herr Sybel, but the outrageous partiality of his history makes his testimony worth very little.

We must, then, agree with the two historians, that the past resistance at home, and provocations *from abroad* contributed largely to produce the excesses of the French Revolution; and we believe that we should equally agree with them, as the necessity for a certain concentration of powers. It is a law to be gathered from the history of all times, and of all countries, that civil and foreign wars always require, and inevitably lead, to an increase of force in the hands of the government. The wars of Louis XIV. against Holland put the power in the hands of the Stadtholder's party, which was the military party opposed to de Witt, the chief of the liberal burghers. The dictatorship in time of war belongs to all forms of government, and particularly to those which are liberal, which are generally organized for peace, and not for war; but dictatorship is not necessarily tyranny, and we can approve, and even admire, the bold power which saved the unity and integrity of France, while we detest it for having stained and dishonored her by a pitiless tyranny. People wish us to confound two things entirely different, by making us admire the reign of terror because it was connected with the deliverance of the country, or by making us forget the latter because it was connected with the former; but we can award justice to the Committee of Public Safety, while execrating it; we can admire and curse it at the same time, without contradiction. Those who are not willing to accord anything to that Committee are obliged to say that the deliverance of the country was an effect without cause, or, further, that governments are *good for nothing*, since not only without doing anything good, but while doing much that is bad, they can obtain prodigious successes. Those, on the other hand, who see in the reign of terror, the success of the Revolution, are obliged to allow that crimes may be useful, and that they are permissible when they are useful. This latter opinion is odious; the other is inconsequent.

MM. Thiers and Mignet were right, then, in introducing into their history both explicatory circumstances and rendered services; for strict historic equity obliges us to do this in reference to human events. It is most true that the revolution was provoked, and this explains its ferocity; it is also true that the Committee saved the country notwithstanding its tyranny. But these

two principles are extremely difficult of application, for *explicatory* circumstances are easily transformed into *necessitating* ones, and in the name of the services which have been rendered, they might lead easily if not to justifying evil, at least to excusing it as an accompaniment of good; and thus we slide down the slope of fatalism; and eminent historians have not always escaped this danger. Undoubtedly, the fatalism in their books is not systematic and premeditated; it is unconscious, even if from time to time of an emphatic form. In one word, they have let their principles carry them too far. Let us render justice to the Convention and to the Committee of Public Safety, let us give them credit for services rendered to their country; but, after all, we have nothing to prove that the same, or even greater services, could not have been rendered by a power more lawful and more humane. We can conceive of a concentration of power and authority which should not be that of the Jacobins; and just as there are many degrees between anarchy and despotism, so there are many degrees in the exercise of dictatorship; and, besides, have we not the right in history to say that such a thing ought not to have been, even without knowing how it could have been otherwise? The dogma of moral liberty does not at all demand of historians that they should reconstruct a history of the past; and we are allowed to declare that Louis XI. was a bad man, without being compelled to relate what would have been the history of his times if he had been another Saint Louis. If the noble spirits who first took in hand the energetic defense of the French Revolution fell into some excess, the fault is that of the time at which they wrote; when the Revolution still believed in itself and had not arrived at the period of doubt and skepticism, so, when it was attacked, its friends defended it with all the ardor of youth and passion.

As the Revolution becomes distant from its origins, we see forming itself little by little, and increasing in size, a sort of presiding deity of revolution to explain to us the grand traditions of primitive nations. The Revolution becomes a dogma; all its acts are heroic and sacred; and its instruments, even the lowest, are priests charged with its sacrifices. Revolutionary fanaticism, like all others, takes most delight in the sharpest and most violent part of its dogma. It is no longer the constituent assembly, nor

yet the Girondists, but the "Mountain," and not even the whole of that, but Jacobinism only which has the right to represent the Revolution in its purity, its truth, and its ideal nature. All on one side is reactionary, all on the other is exaggerated. Between Dantonism and Hebertism there is but one party which possessed the true revolutionary feeling: the little church headed by Robespierre and Saint-Just. This *false* theory of the Revolution was born and dominated in the democratic schools under the government of July. Instead of understanding, as the acute de Toqueville said, that ignorance and the contempt for liberty were the principal causes of the wrong-doing of the Revolution, and the main reasons of its incompleteness and debility, the democratic school was exclusively preoccupied with the idea of equality, treating liberty as inimical and proscribing it under the name of individualism, and, instead of teaching the people its vigorous practice, misled them by that deceitful mirage, fraternity. These views were common to both important branches of the democratic school; the democratico-catholic, represented by M. Buchez, and the socialist, by M. Louis Blanc. There came to pass in that time of confusion of minds and of thoughts, a singular marriage between the catholic and revolutionary ideas. Whilst the official and orthodox catholicism went backward, and the encyclical of Gregory XVI. condemned the liberal doctrines supported by *Z'avevir*, and whilst, on the other hand, Lamennais himself sacrificed his catholicism to his democracy, the confused and assuming school of Buchez persisted in supporting a Jacobinical catholicism, which, notwithstanding the absurdity and hatefulness of its doctrines, has had its influence in the democratic movement of our century.

L'Histoire Parlementaire de la Revolution, a very valuable work on account of its collection of documents, was the production of this sickly and spurious conception, in which some correct ideas serve to introduce the most dangerous and horrible theories; thus, for example, we can only praise its authors when they blame the Constituent Assembly for having sacrificed the idea of duty to that of right; since it is certain that right, without its correlative duty, soon becomes a principle of dissolution. Always demanding of others without demanding anything of oneself; imposing all duties upon the government without imposing any on oneself; claiming liberty without respecting the laws, recognizing no other

duty than to be in arms against some authority; such is the revolutionary vice in its essence. To effect a cure, it is necessary, if possible, to teach the citizens their duties at the same time with their rights; but it is doubtful whether it was in this sense that Buchez meant what he called "the social duty:" for him, the always sufficiently vague formula, "the right comes from the duty," signifies that society, before proclaiming the rights of individuals, should recognize its duties and not theirs, and that the rights of individuals are nothing but the accomplishing, in reference to them, of the rights of society. Now, what are these duties of society? They are summarized in one word, and that a word of Christianity: fraternity—the social duty superior to the individual right—fraternity, true source of equality and liberty. The Revolution thus has the same groundwork as Christianity, equality through fraternity.

But even while resting the Revolution on a Christian foundation, Buchez, by no means, takes up the cause of the Catholic church; for it, according to him, has been an unfaithful interpreter of the gospel; it had "judaized" and was still judaizing in recognizing the privileges of race. But how can the Revolution be Christian and Catholic, outside of the church? Perhaps it may be supposed that the authors of "*L' Histoire Parlementaire de la Revolution*" used the Christian idea in a large and philosophic sense, and not from the point of view of the Revolution; not at all; it is of dogmatic and orthodox Christianity that they speak. "Everything should be *positive*," wrote they, "and this *positive* is found no where but in *Revelation*." Robespierre, admired as he is, is blamed for being only a deist; and Napoleon is praised for having reëstablished religious ceremonies. And, further, the authors vigorously denounce the protestant principle, in which they, like the abbe de Lamennais, saw nothing but the principle of individualism, "self-sovereignty;" to which they opposed popular sovereignty as the common doctrine of the Revolution and of catholicism. "Popular sovereignty is Catholic, in that it demands of each obedience to all; it is catholic in that it includes the past, the present and the future; that is to say, all generations; it is catholic in that it tends to make all human society one nation, subject to the law of equality; and, lastly, it is catholic in that it emanates directly from the teaching of the church."*

*It would have been more correct to say "of the school;" for, in fact, in the scholastic schools, they taught the doctrine of popular sovereignty.

What, then, is this popular sovereignty according to these catholic democrats? It is here that the school unveils and shows forth its true principles. "Popular sovereignty," say they, "means nothing else than the *sovereignty of the purpose* of activity which makes a nation." This principle of the "sovereignty of the purpose" belongs properly to the catholico-revolutionary school, which at this point joins itself to the demagogico-Jesuitical school of the League. In fact, the authors of "*L'Histoire Parlementaire de la Revolution*" equally admire the Jacobins and the League. Together, they tell us, have the two saved French unity, a strange proposition as to the League, which wished for a Spanish monarch. The League and the Jacobins have the common result of admitting and practicing the principle of the "sovereignty of the purpose." But how is this principle identical with that of popular sovereignty? Let us see. The "object or purpose" of society, revealed by the Gospel, followed by the Revolution, is fraternity, *i. e.*, equality, *i. e.*, the abolition of all privileges, as well those of the *bourgeoisie* as of the nobility and clergy: the equality of all. Now the individual may err as to the object of his activity, but not the whole people; thus, in saying popular sovereignty, we say "sovereignty of the purpose." "All being done *by* the people, all will be done *for* the people." However, in thus identifying the people with their purpose, Buchez gives us to understand that he does not trust much to this sort of popular infallibility, for it is to the power of the government that he attributes what he calls "the initiatory principle;" and popular sovereignty, already confounded with the "sovereignty of the purpose," at last means nothing more than the sovereignty of those who are conscious of this "purpose," a privilege which, during the Revolution, belonged to the Jacobins alone; thus the Jacobins are invested with the *rôle*, which seems to belong properly only to the Church, viz.: the *rôle* of infallibly declaring the dogma of social duty.

It is remarkable, that of all the revolutionary schools, the one which has gone furthest in apologies for the crimes of the Revolution is precisely the one which has covered it with a false varnish of catholicism. It combined in fact the fanaticism of two schools, and found means to apologize in the same way for the massacre of September and that of Saint Bartholomew. Never

has the principle of the "sovereignty of the purpose" been published with more astounding impudence, than in this apology for the "*fait de Septembre*," as they call it. It, say they, was a "measure of public safety." If we condemn it, it is because of our "want of knowledge of the causes which ruled our ancestors." We have no longer "the hatred" of that epoch, as if hatred was an attenuating circumstance; generally, those who killed did it only for the love of mankind; besides the larger part of the victims were "culpable;" the Huguenots, on account of "federalism," and the others, for "counter-revolution." We cannot deny that the "*fait*" of September performed "a useful function" in the fatal order of the revolution. That is, say they, all that can be said "for the justification" of those days; and it is enough.

It serves, besides, for an occasion to the authors of "*L'Histoire Parlementaire de la Revolution*," to develop, in all its presumption, the fine principle of the "sovereignty of the purpose." Their political criterion is what they call "moral certainty," which, according to them, is the sole judge of all discussions. Those who "oppose" this "moral certainty," or who even are "incredulous," "do not form a part of society," and may be treated as "enemies." No doubt society might, if it wished, "tolerate" them, but it was not obliged to do it. It might deprive them of all influence and power of action; it would be absurd for society to give the "benefit of its protection" to those who do not recognize it. Those who despise the "national duty" have no "rights." So, further, society has the right to dispossess them even "before" they have acted, it is sufficient that they be designated "by name;" then they may be subject to "process," and "condemned;" and in this way are justified the law of the *suspects*, and all the revolutionary terrorism. History furnishes many examples of this summary method of justice, admitted by our apostles of "fraternity," and they arm themselves with these proofs, even while recognizing that it is dangerous to have recourse to such proceedings, except when in view of *l'interet du but social*.

Such are the sophisms of a school doubly demagogic and doubly fanatical, which joins together the past fury of the "Leaguers," and the still living fury of the Jacobins, a senseless school which was only successful in rendering hateful to all honest

men the principles of revolution and democracy, which preserved in the republican party a fierce and foolish fanaticism, and taught the people no other virtue than the love and hope of tyranny. Without doubt, the unmethodical prefaces of Buchez* do not appear of the kind to do much harm, for they are unreadable; nevertheless they had a veritable influence in the revolutionary party. They nourished its controversy and furnished it with a philosophy, which may be summarized in a few words: The French Revolution, excepting the Jacobin period, was made by and for the bourgeois, by and for individualism, and there was necessity for a new revolution made by and for the people, by and for the principle of fraternity.

We are entirely confounded to-day in our ideas, when we read in the writings of that time that the wrong of the French Revolution had been the sacrificing of equality to liberty, especially as for the last twenty years. The reproach has been just the opposite, far from blaming it with having exalted the individual and exaggerated the principle of liberty; it has been accused, on the contrary, of being the heir of Richelieu and Louis XVI., and having followed their traditions, it is reproached with centralization, excess of unity, love of abstract liberty and the predominance of the social over the individual point of view. In fact, however, these two classes of critics do not exclude each other, and the socialist school combines them. This school agrees with the aristocratic school in complaining that the Revolution unchained the individual, and by apparently freeing him, left him, in reality, without protection; but instead of arguing in favor of the patriotic and ecclesiastical institutions of the past, it dreamed of a social sovereign arbiter of all human interests, guardian of the

* M. Michelet, in his "History of the Revolution" is admirable in what he says of these monstrous prefaces. It was, according to him, from the Baron of Eckstein, a writer of himself somewhat obscure, that Buchez and his co-laborer have borrowed the main part of their ideas. "As this mist," says Michelet, "seemed to them not thick enough, they added to it all the specimens of ignorance, of confusion and of misunderstanding it contains. When they had well thickened the clouds, already doubled by foolishness, they established themselves beneath them, and made there a mixture of formulas, of abracadabras, without rival since the three witches of Macbeth, and thence you may hear rushing into the light all species of doctrine, broken, warped and unfilthy, yoked together."

weak against the strong, of the poor against the rich, the State, like the Emperor of China, to be, as it were, "father and mother" of its subjects. That guardianship which, according to the aristocratic school, should be in the hands of the nobility and clergy, ought, according to the socialist school, after the destruction of those two classes, to pass into the hands of the State. Differing as to the remedy, these two schools agreed as to the disease, which they call anarchy, and we, liberty.

The writer who has most systematically and exactly set forth these views is Mr. Louis Blanc, in his *History of the French Revolution*. Here is the whole of his philosophy: There are three principles of social organization, authority, liberty and fraternity. That of authority ruled in the middle ages, and had its expression in the papal power and afterwards in absolute monarchy. Liberty, or individualism, for M. Louis Blanc continually confounds the two, made its appearance in the world at the time of Luther, and triumphed in the French Revolution. Fraternity is the principle of the future; it showed itself during the Revolution; it fought with the "Mountain," and with Robespierre, and succumbed on the 9th Thermidor.

The whole history of the Revolution is summed up, for Louis Blanc, in this struggle, between the principle of individuality and that of fraternity. This struggle began in the philosophy of the 18th century, which it divided into two schools; one founded entirely on the principle of the individual right, or individualism; the other, which pursued the realizations of liberty by union and by love, the first "the issue of protestantism," the second "the child of the Gospel." With the first, M. Louis Blanc classes Voltaire, D'Alembert, Helvetius, Montesquieu and Turgot; with the second, J. J. Rousseau, Mably, Morelly and even Necker; so much for philosophy, as to the Revolution; the first was sustained by the Constituent Assembly and Girondists, the second by the "Mountain" and by Robespierre.

The principle of individualism should lead to the rule of the *bourgeoisie*, and for M. Louis Blanc, as well as for MM. Buchez and Roux, individualism and *bourgeoisie* are one and the same thing. Let us see how this confusion arises. Liberty, that is the emancipation of each, that is the right to struggle against one another, each with his own chances, his own advantages and

weaknesses; now, in this struggle, he who possesses, that is to say who has in his hands capital and the instruments of work, is necessarily the strongest, it is he always who will be first, who will build himself up, who will enrich himself, who will take possession of the government of society, and this class who possess, who are capitalists, who monopolize the instruments of work, of instruction, and even of morality, is the *bourgeoisie*; so individualism or liberty will profit only the *bourgeoisie*.

We know how bitterly the socialist school criticised the *bourgeoisie* society born of the revolution. What did it do? It gave us, said M. Louis Blanc, a horrible moral anarchy, under the name of liberty of mind, an oligarchy of feudatories, under the name of political liberty, and lastly under the name of liberty of industry, "the concurrence of rich and poor to the profit of the rich." Instead of what was, what should have been the rôle of the *bourgeoisie*? "It should have initiated a system which should have changed industry from concurrence to association, should have made general the possession of instruments, and in one word abolished the slavery of work."

It is in this mood that M. Louis Blanc attacks the Constituent Assembly; he reproaches it with having overthrown the aristocracy of the nobility and clergy, only to substitute for it a *bourgeoisie* aristocracy, and with having replaced the privileges of birth by those of wealth. To give weight to his accusations, he divides the citizens into two classes, *active* and *inactive*; the distinction between them being founded on property. In all the reforms of the Constituent Assembly, what was there for the people? The abolition of the titles of the nobility gratified the *bourgeoisie*; in what way did it benefit the people? The engrossment of the goods of the clergy only benefited those who could buy them. Was the free vote of taxes of any use to those who did not pay any contributions? Doubtless all this was just and useful, but no one thing did good to the poorer classes. But after these bitter criticisms M. Louis Blanc acknowledged that in the country "the lot of the people received an immense amelioration." It is difficult to contradict and stultify oneself with a more perfect society.

The Girondists went further than the Constituent Assembly, and should at least have the credit of being republicans; but M.

Louis Blanc reproaches them with two things: federalism and individualism. Still he pardons their federalism, which is hardly proved besides, but their individualism is the same as that of the Constituent Assembly. It is always the predominance of the *bourgeoisie* class, the principle of individual right, the neglect of social duties, demanded by the principle of fraternity. To prove it he brings forward the plan of the Declaration of Rights of the Girondist Constitution framed by Condorcet, and the Project of Robespierre read to and approved by the Jacobins. As has been well remarked by M. Edgar Bennet, Robespierre held very little by such ideas of property as he developed at the tribune of the Jacobins, for he never spoke in favor of those ideas after the definitive adoption of the Constitution of '93, which is so little socialist that its definition of property is precisely the same as that of the civil code.

The strange theory which makes the principle of fraternity supported by the men of the reign of terror, is borrowed by M. Louis Blanc from the authors of "*L'Histoire Parlementaire de la Revolution*." What is his own about it, is the substitution of the socialist principle for the Christian; whereas the originators saw in Jacobinism only an unconscionable and inconsistent catholicism, M. Louis Blanc sees in it an anticipated socialism. These are two equally grave historical errors, which we will not urge, preferring to leave their reputations to the democratic historians MM. Michelet and Quinot, who, speaking from the heart of the sanctuary, are an authority privileged to condemn and combat these unhealthy and sophistical doctrines.

What is evident to-day to all the world is, that the war made on what they call individualism is war against liberty, and will never promote the progress of fraternity among men but that of despotism. It is further evident that the association of terrorism and fraternity is monstrous, and will be no less odious when made in the name of democracy than when in that of the church. To kill men for the love of humanity is a scandalous defiance to the human conscience. We must not, certainly, reproach M. Louis Blanc with having reproved the terrorism as a system, for he protests more than once against the system, and combats with energy against the principle of public safety. But it is none the less true that, according to him, the terrorists are

the only true representatives of the idea of the Revolution, and that it retrograded as soon as they were conquered. His ideal is a democracy of equality and authority, bold and despotic, distributing to all their daily bread, "a secular convent, not having even the consolations of the religious convent, the hope of another world and a better life. This abstract dream, born at once of sophistry and imagination, this utopian spirit, from which springs the hatred of ranks, has most cruelly wounded our country, and even while respecting this intention of our author, we cannot help regarding him as one of the most harmful dreamers of our country.

We do not like to believe that a writer is absolutely wrong, and agree heartily with him in giving fraternity a place in the social and political order. We give M. Louis Blanc and his school credit for having proclaimed this principle and having recalled it to the notice of generations too much inclined to materialism, and to the lettered classes and those in easy circumstances, for whom the advantages they enjoy in society make it particularly a duty; but the use which M. Louis Blanc makes of this principle destroys all its virtue, for in his hands it becomes a source of hate, instead of a bond of union. Every effort, of whatever nature it is, to show the well-known inconveniences of democracy, is, to him, a proof of hate and scorn of the people; and every attempt to guarantee the right of those who have property, is, to him, a spoliation of those who have it not. To interpret in this way the French Revolution, to misconceive the prodigious efforts it made to assure the rights and well-being of the greater number, is to render progress absolutely impossible and illusory, for, absolute happiness being an inaccessible ideal, it will always be possible to represent the more happy as privileged and greedy, and the less happy as oppressed people who have the right to become oppressors in their turn. On these terms the social war is inextinguishable. They demand with hate and violent rudeness the bettering of the condition of the poor and feeble, and when these rise to the condition dreamed for them, they pass into the privileged class, and become in their turn the object of hate and violent rudeness. Whichever side suffers will call itself the people; as soon as it ceases to suffer it will become the *bourgeoisie*, egotistical and greedy, so that it seems we only love the people on con-

dition of their being miserable ; that we only interest ourselves for their happiness as far as they are deprived of it, and instead of inspiring the one side to desire to elevate itself by work, and the other to hold out a fraternal and protecting hand to those who are less favored. Envy is developed on one side and fear on the other, and the germs are sown of a war, stupid, barbarous, satanic war, between those who have and those who have not.

Further, it is a question whether society would not be enlarged by the application of the principles of fraternity, but animating this principle with despotism, holding up Robespierre and Cloom as its representatives, is not giving it much of a recommendation. Without exciting the odious quarrel between rich and poor, we can recognize the existence in society of weak and strong ; and there is nothing theoretically impossible or unjust in a certain paternal arbitration between them, exercised, if not by the State, at least by free associations. It is hard to admit that the human race has nothing to find ; nothing to invent ; nothing to discover as to the social relations of men. We offer, then, willingly, a sympathetic attention to minds which are working in that direction, and are not among those who, in the name of thrones disputable in themselves, shut out all investigation on that side. The first condition of the union of classes is not to raise up a war of classes, and the first duty of social fraternity is not to attack humanity. As to the Revolution, it has had its work, as the present time has its own. That work was to establish right as the foundation of all society. Before all, let us not touch upon this principle ; and this society, from concurrence, described by the socialists in such black tints, whose members are at least men, is worth much more than a society of happy sheep protected by a paternal authority, which would be delegated by the sheep themselves, instead of being confided to an hereditary shepherd. The socialist history of the Revolution, as MM. Buchez and Louis Blanc have understood it, is at bottom a retrograding history ; and it is with the society of the middle ages before them that they have tried to picture the future of modern society. Equality by authority, and fraternity by despotism have seemed to them the ideal of society. They have in no way understood and have everywhere combatted that powerful principle of the individual right, which is and ought to be the first province of

our society, which has caused the greatness of the Germanic races, and which is in no respect, whatever is said, incompatible with the French genius, provided the doctors of progress do not cause to float before us a false paradise of authoritative communism.

The radical, Jacobinical and socialistic theory of M. Louis Blanc seems to us to be the furthest point which the philosophy of the Revolution has reached. To the absolute and radical opposition of the aristocratic and theocratic school succeeded soon the constitutional theory, which accepts the Declaration of Rights and the ceremony of the "*Jeu de Paume*," then the liberal theory, which admits politically the constitutional principles, but at the same time accepts historically the Committee of Public Safety as the liberator of the country, and finally the democratic school, which proclaims the heritage of Robespierre and his theories, and considers him as the insumation of the revolutionary idea. If any theoretician has gone further, we should not feel obliged to give him a place; Hebertism and Maratism are doctrines too low for philosophy and history. The moment when the philosophy of the Revolution reached its maximum of acuteness, it began to go backward, and from investigation to investigation, from criticism to criticism, from reservation to reservation, to arrive by degrees at a sort of retraction, without daring at any time to come to the counter-revolution.

WE are not specially warm admirers of the United States Supreme Bench as at present constituted; still less do we admire the clients in whose favor their last notable decision was pronounced; but we cannot refrain from heartily rejoicing in that decision. For over a year the courts of the most populous of our Territories have been "organized to convict" a certain class of offenders, and the majority of the population systematically excluded from the grand jury room and the jury box, as friendly to the accused. Judges have used from the bench such language as has not been heard from an English speaking judge since Eldon's days—hardly since those of Jeffreys. All this has been done in opposition to the

emphatic advice of the United States Attorney General, our chief magistrate preferring to listen to his clerical advisers, who were especially interested in a laudable missionary enterprise in the Territory in question. The United States Supreme Court was evidently expected to parody the Dred Scott decision by ruling that a Mormon has no rights that any other white man is bound to respect, but they have done themselves honor by asserting the equal rights even of this scandalous sect before the law. All this time no one seemed to know or feel how dangerous such judicial precedents were as regards the rights of every American citizen. Equally mortifying is the fact that after all our platitudes as to the uselessness and wickedness of persecution, public sentiment rather endorsed than repudiated a manifest perversion of the law in order to strike a blow at a religious party that it disliked. And if even the worse than uselessness of persecution was fully illustrated, it has been so in the history of these Mormons. That the sect did not die out twenty years ago, is mainly due to the fanaticism burned into it by "the vigorous measures" adopted by its hostile neighbors in Illinois. Nothing makes this weed grow faster than vigorous tramping. On the other hand, really vigorous and effective blows against Mormonism have been dealt during the last few years. The suppression of the rebellion did much to discredit Young as a prophet; the enforcement of the United States revenue laws by the United States officials on the very soil of the fanatics, and without one hand daring to raise itself in violent opposition, was a whole bucket of cold water about their ears. And now the judges and officials who take counsel with Rev. J. P. Newmann, D. D., have fanned back the old fury to white heat and given the sect a new lease of life.

THE Alabama dead-lock is at once serious and insurmountable, and it will do much to discredit the system of arbitration, if such entanglements are to be a usual accompaniment of these efforts. The American case is certainly not a remarkably logical effort; its authors have wholly missed the points of Senator Sumner's famous argument, stating the dispute as indirect claims, whereas,

the whole point of his speech was that these were direct damages. The concession implied in the use of the other word is the gravest possible, as it is a legal maxim that there can be no suit for any but direct damages, England's refusal to go before the court with the moral certainty that these claims will be rejected, is hardly apprehended rightly. If the Genevan Tribunal were an ordinary court of justice, with a distinct code of laws and a competent legislature behind it, her refusal would be absurd. But in fact the Tribunal is a court of etiquette, not of law, and a precedent set by such a proceeding would be of force forever. Future ambitious Bismarcks would make Holland, Belgium and Switzerland feel the weight of their hand under the cover of international law itself, were such a precedent to become valid.

THE Legislature of Pennsylvania has at last so far given way to the demands of justice and decency as to repeal the charter of those institutions which have disgraced our city—the chief American seat of medical education—by the sale of diplomas. There is good reason to believe that even this much would not have been done, had not some of the heads of these institutions become offensively mixed up in local politics. An Edinburgh publisher has just brought out a pamphlet with the title, “The Philadelphia Graduate,” written by a professor in King's College, London. It seems that of late years, a great number of persons (called *literate*s) have been of late years admitted to holy orders in the Church of England, without taking any degree in the Universities. The absence of the academic hood, usually worn by graduate clergymen over their surplices, has hitherto marked these clergymen out from the rest. Some of them, seeing the advertisement of the London agent of the Philadelphia imposture, hastened at once to procure the mercenary diploma that would enable them to wipe out this disgraceful mark of subordination. A London robe-maker, a man for the times, at once prepared a Philadelphia hood for these literates, and says that he found a very considerable market for its sale. It now remains to be seen what these literates will do with their honors, since the exposure of the fraud, which in England has been very public and effectual.

ENGLAND has lost her greatest theologian, and perhaps her greatest metaphysician, in the death of Frederick Denison Maurice, who died on Easter Monday, after two or three weeks' illness, in his sixty-eighth year. The son of a Unitarian minister, he refused to sign the articles when he graduated at Oxford. He was for a few years associated with his brother-in-law, John Sterling, in the management of the *Athenæum*, which the latter started; afterward he edited for some years *The Educational Magazine*, and published a novel. The writings of Thos. Erskine of Linlathen and others of the Scottish kirk who were mixed up in the "Row Heresy," led him to the belief that Trinitarian orthodoxy, rightly understood, was nearer the truth than his inherited belief, and he entered the English Church. He was expelled from King's College, London, for teaching (with Augustine, Boethius and others) that the force of the Scriptural word *eternal* was qualitative not quantitative, i. e., did not necessarily mean any duration of time, longer or shorter. He was a prominent mover in the party of Christian Chartists, who endeavored to understand and help the working classes during the agitation of 1848-50—a party which accomplished two results, giving a great impulse to the co-operative movement, and founding "Workingmen's College" in London. In late years he was the center of the most hopeful and earnest body of young men that England can show—Thos. Hughes, Geo. Macdonald, J. K. Ludlow, Edward Strachey, R. H. Hutton, Prof. Seeley, etc., a group represented by *The London Spectator*. Of several poetical tributes to his memory we quote a passage from a thanksgiving by George Macdonald, in which the poet gives thanks :

Lord, for Thy prophet's calm, commanding voice,
 For his majestic innocence and truth ;
 For his unswerving purity of choice,
 For all his tender rath and plenteous wrath ;
 For his obedient, wise, clear-listening care
 To hear for us what word Thy word would say ;
 For all the trembling fervency of prayer,
 With which he lead our souls the prayerful way ;
 For all the heavenly glory of his face
 That caught Thy white Transfiguration's shine,
 And cast on us the glimmer of Thy grace—
 Of all Thy men late left, the most divine.

For all his learning and the thought of power,
That seized Thy one idea everywhere,
Brought down the eternal dawn into the hour
And taught the dead Thy life to claim and share.

For his humility, dove-clear of guile,
That sin-denouncing, he, like thy great Paul,
Still claimed of sin the greatest share, the while
Our eyes, love-sharpened saw him best of all.

NEW BOOKS.

Messrs. D. Appleton & Co., of New York, have published another volume of sermons from the pen of Robertson's biographer, Rev. Stopford A. Brooke, with the title, *CHRIST IN MODERN LIFE*. Mr. Brooke is of the English Broad Church School, and belongs to the Robertson section of that rather than to the Arnold or Maurice sections. His present book, which is a consistent systematic whole, represents the leading idea of that section of the school, viz.: that the new wine of the kingdom is always bursting the old bottles and requiring new ones to contain it. To reassert the old truth in its new connections, as connected with and not contradicting modern science, art and modes of thought, is the purpose of the book. Thus his sermons on prayer are an assertion of its use and significance, even in confession of the scientific conception of unvarying rational order. Subjects not ordinarily brought into the pulpit, such as the legitimacy of art expenditure, the theory and cure of hypochondria, the preservation of a true and manly reserve in speaking of our inward life, are treated in a way that coincides with the highest lay discussion of the same topics. In their style and brilliancy Mr. Brooke's sermons are not inferior to any of our day—and there never was an era more abundant in great preachers. These sermons are *fascinating*. As to their general drift of thought we might be inclined to dissent to some extent, but we welcome them as the work of a man of movement. We believe with Isaac Barrow that "running water will run itself clear." Our greatest dangers are in our tendencies to stagnation and indifference.

THE
PENN MONTHLY.

JUNE, 1872.

THE LEFT HAND OF SOCIETY.

NATURE is a sort of Sphynx that has lost or pretends to have lost her memory. She keeps asking the same unanswerable questions over and over again ; all her children must attempt to answer them, must fail to answer and yet not fail utterly if their attempt be in any measure a sincere one. Sometimes she seems to undiscerning eyes to devise a new one, but the newness is only apparent. Thus since the Jesuit society began its activity in Europe, the education question has been the one that continually recurs in all politics. Gruff Bismarck, even, has to face it, express in fierce speeches the torment and the annoyance that it occasions him, and fiercely cut with Alexandrian sword-sweep some of its knots that were insoluble. But to one who looks out of Humboldtian eye, upon the great Cosmos of human history, the education question is seen to far antedate Loyola and his associates. All history has been a great education, and the men who really deserve to be named among us, are the great school-masters—Homer, Charlemagne, Alfred, Socrates and Zoroaster.

Another of these ever-recurring questions is the question, What society shall do with its left hand? in a word the Woman question. If we may trust the old philosophic idealists, the very existence of woman was the question of questions at the race's first starting. The origin of woman as a separate entity was to them

the commencement of man's fall. "Male and female created He them" says Moses. "Yes" say Erigena, Eckart, Paracelsus, Böhme, Baader, and all their ilk, "He made them male and female, each and every one of them; not this one male and that one female, but all androgynous. This actual duality, this antagonism of nature within the same species, is inconsistent with the unity and perfection of the first creation. Each was then perfect in him-herself and needed no *alter ego* to make up the rounded whole." And so they lordily scout the existence of the sexes and all their relations as a part of our corruption, and see no possible perfection for man until some future state of existence restores us to our first androgyny.

We are not going to defend their views; we are quite willing to accept the existing state of things as best, and make the best of it. We only quote them to show what really thoughtful men have said as expressing their belief that the sex question is a fundamental one as the root of social disorders. The old Rabbis had a tradition equally curious, that the whole social tragedy was rehearsed in Paradise itself. Our esteemed Mother Eve was not, it seems, our Father Adam's first wife. His first was Lilith, a beautiful, wicked vixen who led poor Adam a sad life of it. When he could endure it no longer he procured a divorce, and Lilith took her place among the spirits of mischief. She still delights in tormenting Eve's children, strangling infants in the cradle and stirring up strife in the household. Her especial achievement is to get possession of the minds of Eve's daughters, and make them altogether such another as herself, filling them with pride, envy, jealousy and all manner of fierce tempers. Some believe that she has been the real head-centre of the Woman's Rights movement, and deserves the public recognition of her services by its adherents.

Our chief cause of regret in regard to later discussions has been the partial success of the attempt to confound the whole Woman question, with the Woman's Rights question. The latter is a purely modern issue, not one of the old Sphynx's perennial puzzles. Mrs. Mary Woolstonecraft opened the dispute with her book on Woman's Rights at the time of the French Revolution, following the drift of the spirit of that age in putting the question into that shape. Others have been following suite ever since—some

for and more against. The advocates of equal political rights for women weigh more heavily than they count. Three such men as John Stuart Mill, Herbert Spencer, and Frederick Denison Maurice, outweigh a great many more positive asserters on the other side. Their weight is not greatly supplemented by their friends of the sex that they are supposed to champion. Indeed it is hardly too much to say that of all that have vigorously discussed the question, the ablest men have been on the Women's Rights side, and the ablest women (Mrs. Browning, Mrs. Stowe, Cath. Beecher, etc.,) on the other side.

The mere question of woman's equal political rights is but a fractional and accidental part of the whole Woman question. Nothing can be more mischievous than to confound them. The whole question is: "What shall society do with its left hand?" It is no complete and sufficient answer to say: "It shall vote with it and hold office with it." That possibly, but not that only, for that surely is not the sum of its unrealized uses and capacities, nor are these uses clearly those that will by exercise open up new and desirable avenues of use and exercise. Rather the old Sphinx throws us back on the previous question: "By what general formula shall you express to yourself the whole range of use and capacity that lies in that left hand, and so decide of this and any other special use, whether it is the one for which that left hand was designed?" This is the question that we must solve according to our powers, or undergo the penalties that await those who have no answer to give the Sphinx.

The recent discussions of the subject have been neither blind nor fruitless. Some things have come clearly into light. We have here a trace and yonder a hint pointing to the true solution of the question. Facts have been brought out that offer us very material aid in the investigation. So far as we have been able to follow what has been said and written on both sides, the general drift of thought and conviction has been that man and woman are not, as the old barbarian ages thought, respectively superior and inferior, but only different and complementary to each other; woman's especial gift being of the sort that rude states of society need just as much as any other, but are less likely to appreciate. And (2), as regards the specific difference between the sexes, it seems to be the general feeling on all hands that women have been

sent into the world to take the charge and stewardship of persons, and men that of abstract truths and principles. (3) There seems to be further the general and growing conviction that the existing status of woman in society is not such as to furnish the freest play for her peculiar uses and aptitudes; that it admits of and loudly calls for great and sweeping improvements, such as (4) can be effected not by legislation and government, but by earnest effort (united and personal) and by public opinion. In stating this we are trying to discharge the office of the clerk of a Friends' meeting, and to embody briefly what seems to be "the sense of the meeting," as expressed in the words of "weightily concerned Friends." We may, like many such a clerk, have left out voices that deserve a hearing; but we hope not. These four positions seem to us to sum up the view taken of the Woman question by the great body of those who have taken it up as a matter of serious thought. They are not indeed the views of zealous partisans of either side; but the great mass of society are not at all partisans and have only too little zeal in regard to the matter.

Women and men, then, are not either the inferior of the other, but they are profoundly unlike each other. For some things each is the inferior of the other, but these partial inferiorities again are balanced by sufficient compensations. This unlikeness is unjustly made the ground of all sorts of unfavorable comparisons; take a typical instance of this, the historical status of women in Judea. The old Rabbis put a thanksgiving into the synagogue service, in which the Name was blessed "that Thou didst not create me a heathen—a slave—a woman." But the Rabbis were not very discriminating students of the philosophy of life. They estimated all things by a crass intellectual standard, and despised the common people even, because they knew not the letter of "the law." Had we assumed on their word that the women of Judea were a slavish, mindless class, unfit associates for their learned husbands, and at best only good household servants, we should have done them great injustice. We know something of their Old Testament history that will not harmonize with such an estimate. We know still more of them through the Gospels, and we see that, under circumstances of great difficulty, they could display a delicacy, a spiritual insight, and a courage to which their brothers and husbands were strangers. Paul of Tarsus is fre-

quently construed as a hard judge of women. He certainly insisted that in the worship of the Christian Church they should hold the place assigned them by the social etiquette of the time and the land in which they dwelt; but when it comes to speaking of individual women he yields to no man in his reverence for them. His companion, Luke, speaks three times of Aquila and his wife Priscilla, and always in that order; Paul also speaks of them three times, and always as "Priscilla and Aquila"—the best man first. And Judea is but a specimen of the world. To take the judgment of the average, self-conceited, self-satisfied man, woman is the inferior being; but judged by a truer and diviner standard she is on the whole no jot or tittle behind man. In a great mass of the practical affairs of the world, indeed, she needs must take a second place. "When two ride a horse, one must ride behind," and that rearward place naturally falls to the fine, more delicate, less hardy organization, which by the stress of outward circumstances is forced into the position of dependence and subordination.

One point of character especially contributes to this. She has not the divine gift of impatience, but instead of it the diviner gift of patience. Suffering is her birthright; she suffers and submits where man rebels; she leaves wrongs and anomalies often as they are—accepts them as ultimate facts of the universe. To this, far more than to any defect of education, we must ascribe the almost universal conservatism of women, in Church, State and society. Man dashes at these wrongs with all his power, and attempts their overthrow. Hence he seems to take a large share in the world's work, and to contribute far more to its actual well-being. He has the *eclat* and the glory of the world; she its sorrows and its silence. But impatience is of the Old Testament; patience of the New. Nothing in the Sermon on the Mount is so striking as the series of blessings pronounced upon woman and her lot, where her name is never mentioned. Even man is warned that he must learn the same lessons and share the same spirit, if he is enter into the kingdom. His berserker wrath against wrong and injustice is not the only image of the divine upon earth.

Another unjust reason for the contempt sometimes expressed in regard to "the weaker vessel," is the false aims and purposes that actuate general society, what we might in a word, and in the

highest sense of the word, call the *worldliness* of society. Our aims are big but not great ; we are taken to be the mere outside show and glitter of things. So every religionist preaches, and nearly as often illustrates his accusations by his practice. So every man who has any real insight into life, and any real concern for the progress and development of his kind, might preach with equal energy. Most men, in the church and out of it equally, do live for things that are not worth the living for. The possession and the display of wealth though earned at the cost of all our powers of real enjoyment, is the standard by which we estimate our successes. When we come to feel that life and society are something in themselves, and that man is an end in himself and not a means to things, then woman will rise in our estimation to her true level, side by side with man. Every new interest awakened in philosophy and art has contributed to this. Every great thinker that has turned men's thoughts away from the mere means of living to its end, has been woman's benefactor. That old bachelor and misogynist, Kant of Koenigsberg, did more for her than all the money-making success-worshiping Benedicts of the Germany of his day. So long as the lower ends, to which woman can contribute little or nothing, are held up as the true ends of society, so long will she be looked down upon as man's inferior. The golden age of the future will find the sexes as the golden age of the past shows them to us, side by side.

From the equality we pass to the difference which co-exists, with it. Some of the Women's Rights people as good as deny the existence of any difference save that of the physical organization. They assert that in every species of mental power she is simply man's equal and his double, as capable as he of all the great intellectual efforts and achievements, and only cramped in her accomplishment of them by defective education and social prejudice. They admit, be it noted, that woman has not done so much as man ; they ascribe the defect to the circumstances of her growth and development. Now if the two sexes were not part of the same species, but were two utterly distinct species, brought up in mutual isolation and then presented for comparison, there might be some ground for such claims. But instead of that they have grown up together, and in the closest union. By a divine ordinance, every man has had a mother, whose ignorance and

prejudices must have kept her sons upon her own level, and every woman a father whose intellectual powers and culture she has in some measure inherited. In the East, where woman's influence is cramped by her lack of education and confined to the harem or the zenana, the mutual reaction of the sexes is seen in its degrading tendency. The Hindoo or Persian is backward and weak in his intellectual growth, because he had a mother whose status and culture was but one step above that of the slave. Indian missionaries find that if they are to do even the men any good, they must begin in the zenana. Indian reformers cry out that the ignorance of the women of India holds down all society, and they too are laboring vigorously to promote woman's education.

The history of the past fully confirms this view of Oriental society. In the early days of Islam, when the East had great men, she had also great mothers and wives who were fit to be their companions. Look for an instance at the group of women that gathered around the Prophet and compare them with their modern successors, the denizens of the seraglio. The harem has been the blight of their social life as really as the Publican system of taxation has blighted the industry of all Mohammedan countries, and as a bare, dead monotheism has blighted their intellectual life.* Now if this be the degrading influence of one sex upon the other, under an unnatural and unwholesome set of circumstances, equally great must have been the reaction under those that are more right and natural. Women have been for centuries the mistresses of Christian homes, where no insurmountable obstacles have prevented their achieving all that the examples of their brothers and husbands could inspire them to attempt. Yet an actual survey of the great roll of mental achievements that marks the nineteen centuries of Christendom reveals the fact that women illustrious in art and literature are exceptional phenomena; not one woman occupies a foremost place in painting, in poetry, in the drama or in

* We look upon the one-sided masculinity of Mohammed's teaching as the true root of this degradation of women. Unlike Christianity, it is a religion of principles and abstractions, severed as far as possible from all living, personal, human interest. Where Sufism, by mingling it with the old Zoroastrian creed and other mystical elements, has made of it a system utterly different and indeed feminine in its spirit, there women stand higher. Many of the greatest Sufi saints were women.

music. In the inventive arts (as has often been pointed out) they are simply nowhere. One woman, the wife of the inventor of the Jacquard loom, did help her husband out of one of the minor difficulties of his invention, but the grand idea was his own. Since Eve made Adam his first haggis, women have been reddening their fair faces, burning their delicate fingers, and destroying their appetites, by stooping over fires to stir pots by hand. No woman of them ever thought of applying the simple device of a steel spring and simple clock-work arrangement to the disagreeable task. Be it remembered, withal, that these facts prove no essential inferiority in women. There is a still higher standard of judgment than this; there are greater things than art, literature and inventions. In view of this supreme standard, she may claim equality, but may not deny the great and profound difference which separates the two sexes.

Wherein then does the difference consist? To put it largely, we may say, and indeed have already said, that woman's work in the world is the care and stewardship of persons; her powers are such as especially fit her for that work. Man's work is the care and stewardship of principles. These two—persons and principles—are the two great sets of interests that Providence watches over. In the two sexes He has devised the instruments of His beneficent care. For these two great ends, the care of persons and the care of principles, society in all its forms—the family, the church, the nation and even the mercantile world—exists. When it neglects either for the other or for anything else it falls short of its purpose; if it cares for principles and not for persons it becomes hard, cold and pharisaic; when it cares for persons and not for principles it becomes weak, self-indulgent and effeminate; when it puts things in the place of either it becomes materialistic and mammonistic. Each of these deflections from the straight path bring with them a punishment after their kind—a punishment not arbitrary nor postponed to the indefinite future, but growing swiftly out of the very nature of things.

Woman is the personal element in life and thought. We do not mean that she is or ought to be a mere bundle of emotions and sympathies, incapable of clear, intelligent thought and careful study. Far from it; but her thought is rooted in her emotional nature, and mediated by it. She naturally approaches every topic

from the personal side. This is her strength, not her weakness, just as it is man's strength that his emotions are rooted in his intellect; he thinks that he may feel. Her power is keen tact and quick intuition; his is patient study and sustained logic. She learns more rapidly, he more thoroughly. Any one who has taught a mixed class of boys and girls knows how much the latter excel in their recitations, but the profit of the study is rather on the other side; it tells far more powerfully on the boy's later life. Just so is it in the serious occupations of life. The superintendent of the Elgin watch factory told the writer that of the great multitude of men and women who are employed in that vast establishment, almost every woman learnt as much during the first fortnight of work, as she ever learnt. At the end of one fortnight a man had learned but little and was not at all an efficient workman, but every fortnight of his whole life he kept on learning. The same general law is illustrated by woman's instinctive choice of mental occupations. Very few of them have ever evinced any great fondness for abstract studies. Olympia Morata and Mrs. Somerville are very exceptional names. They have been tolerably great in all mental pursuits of directly human interest. In lyric and dramatic poetry they have fine names to boast. As religious leaders and enthusiasts, they are among the most illustrious—far surpassing men in the sphere of mystic experiences, raptures, visions and revelations. We do not share the general contempt for these things, perhaps because we know something about them. But here, again, they are not great theosophers; they are not great Böhmes, Swedenborgs or Hahns, that line being the very mathematics of mysticism. In art, of course, they find a field native to their spirits. On the stage they take the higher place, through the very peculiarity we speak of. Their failure to take the mastery in music is one of the mysteries. Why have we had no great woman composers?

One of the chief questions of the day is their capacity to become physicians. Why should they not? We believe that the wish and vote of all reasonable people is that every possible avenue shall be open to women, and experience alone must decide which are possible. They are certainly not attempting medicine for the first time. In all the simple ages they took charge of medicine proper, and left surgery to men. That seems to have been the

division of labor in the Homeric age, and all the earlier periods. The tradition sticks among the common people, who turn instinctively to some old woman for a charm or potion to rid them of disease, just as their fathers did ages ago in the German forests. The lady of the mediæval castle was cunning in all manner of herbs and simples, and the wisest and most courteous of nurses.* The doctors of the time were quacks and alchemists, who prescribed monstrosities. The filthier and the more revolting a remedy was, so much greater its efficacy in their view, and to judge from old medical works in the writer's possession, this notion held its ground until well into the last century. The spagiric school of Paracelsus and Crolius, Libavius and Willis, saw, in a confused way, into the connection between chemistry and medicine, and effected a change for the better. Sydenham saw that disease was often Nature's effort to get rid of some local disturbing element. Harvey pointed out the wonderful vital mechanism of the frame. Then came physiology, comparative anatomy, and a host of other improvements, but all making medicine a more complex and abstract science, and therefore less open to woman. The last and greatest step of progress, however, that which dates from Abernethy, sweeps away much that is cumbersome and technical. It regards man not as a mere physiological complex of arteries, nerves, etc., as did the school founded by Bertot; nor yet as a retort for all sorts of chemical experiments, but as a living organism. It takes life as its central conception; it is the biological phase of medical science. If this *be* the last word of medicine, and we believe it is, then woman is as well fitted for its study as man is; nay, better fitted. For, as the new school of "regulars" point out, the tendency to generalization which characterizes man is and has been the weakness of medical science. The old doctor must have his rule for every distinct case, and must kill or cure by book; it hardly mattered which, so long

*Mrs. Hutchinson tells us that when her father was lieutenant of the Tower, her mother paid the expense of various chemical experiments undertaken by Sir Walter Raleigh and Mr. Ruthin (then prisoners), in order to perfect her knowledge of medicine. Mrs. H. made use of her own knowledge of medicine during the protracted siege of Nottingham by the Royalists.

as the book was followed.* The new doctor looks upon each special case as almost a separate disease, standing apart from all other cases; and instead of attacking this or that symptom according to the directions of a set of formal rules, he addresses himself to the whole man, and the restoration in him of that impaired vitality, of whose decline any specific disease is but a local symptom. Is woman at any disadvantage in the mastery of such a science? Has it not been the source of her strength and her weakness, that she must individualize and not generalize? Have not all other mental gifts that she possesses been subordinate to this one gift of quick, personal discernment and subtle tact, which enables her to know each human entity by itself and apart from all others? Even among men, it is not mastery of scientific details, but quick, personal tact, that is generally the mark of the really successful physician; the former often misleads—the latter never. Who knows how much of their success the old doctors owed to their chief ally, the nurse, whose keen discrimination counteracted rather than supplemented their mechanical and “regular” doctoring? We look for a great career for woman in medicine, now that, following the course of every other science, it has passed out of its mechanical into its dynamical phase. In

*The homely mother-wit of the people discerned this, as may be seen from almost all the “Joe Millers” which gird at the faculty. Thus one doctor finding a patient dying of heart disease, allowed his wife to get for him a “fat-liver pie,” for which he had a craving. The man got better, and down into the doctor’s mem. book went the maxim: “Fat-liver pie good for heart disease.” The next patient in heart disease (a Frenchman) ate the “fat-liver pie” and died and at once the rule was modified in the doctor’s mem. book: “Fat-liver pie good for Englishman in heart disease, bad for Frenchmen.” He was bound to make a rule of it.

Another rustic Esculapius took his apprentice on a round of visits. The first place he stopped, he savagely rebuked the patient’s wife for allowing her husband to eat oysters. She confessed the fact with equal contrition and wonderment. The apprentice asked his master on their way to the next, how he knew of the oysters, and was told “by seeing the shells under the bed.” Next day the apprentice went alone to see the same patient, and came back with open eyes and mouth. “Why, master, the fellow has been eating a horse!” “A horse! what put that into your head?” “Why, I peeped under the bed and saw a saddle and a bridle!” Thus does the common folk hint its opinion of medical diagnosis.

returning to her it only comes back to the hand from which it took its beginning.

But all the reasoning that supports the claims put forward by women to the doctorate applies as reasoning against her claims to the elective franchise. Woman should not vote, not because the sphere of politics is too coarse for her delicate presence, nor because she is unable to discharge the other duties of citizenship that are bound up with suffrage (especially those that are military in their nature), but because her gifts are exactly those that disqualify her for a fair and just decision of political questions. If government approached the political and social well-being of men from the individual side, if each State were to find it best to pass a separate bill for each of its citizens, defining his possessions, privileges, rights and duties, then woman's counsel and presence would be simply indispensable in politics. We could not get on without her, because only by her tact and perception could we get at even an approximate estimate of the merits of each case. But all good legislation approaches these questions from the opposite side. It regards men in the mass, and makes rules for the mass, not for individuals as such. The worst laws upon our statute books are those which are made to meet exceptional cases. Some of these are well known as "private bills," and the most intelligent and advanced movement toward the reform of legislation is the movement to greatly restrict and limit these bills, which bring back upon the nineteenth century a large share of the mischiefs of the mediæval privileges (*privi leges*). Could we get an amendment into our State Constitution during its coming revision, that would forbid the legislature to pass any bill that contained the name of any place, person or corporation, the statute book would be in future years relieved of a great burden, the commonwealth of a great incubus. But even then woman's tendency to personality would be dangerous if she were to exert any decided influence on politics. For worse than these private bills, that are formally such, are the bills which are addressed to masses, but rest upon no sufficient generalization in regard to the needs of society in the direction of their legislative force. These too are really bills made to meet exceptional cases, and are not suited to promote the common weal of the State, and just here woman's influence would be especially dangerous. It is her strength, not

her weakness, that she must look upon all things from the personal side, and that whether a case is normal or exceptional is, happily for the race, in no way her concern. She takes it just as it stands and by itself. She was not fitted in her creation to legislate for society, but especially fitted to take charge of the exceptions upon whom general rules press hardly. Man's gift is justice; hers is mercy. Shakespeare shows his fine tact in putting the greatest of eulogies upon mercy into the mouth of a woman. In that speech, as everywhere, Portia's sex breaks through her disguise.

We need not dwell on the very obvious influence for evil that woman would exert in intensifying the "personalities" of politics and increasing the rancor of political discussion. It has been often forcibly put, but it admits of a retort which upon the surface is quite a just one. We are asked if things could be much worse in that regard than at present. We think they might; and we ascribe what of evil does exist, to the influence and the practices of unmanly and womanish men, who find it much easier and pleasanter to confound an opponent's personal character and that of his principles and views, than to take each on its own merits. A truly manly man is never a bitter partisan, although he may be a very zealous one. The mark and signature of his manhood, is his justice and fairness. Such men are in the minority in all political parties, and are nowhere more rare than in the public sphere where woman's influence has had freest scope—the church. Where have party lines been drawn more rigidly or parties cries had greater efficacy? When, also, has woman's voice been ever raised as a peace-maker, or rebuker of the scandalous personalities which are the invariable disgrace of religious controversies? And invariably the most rancorous "champions of the faith" have been soft-slippered, smooth-tongued, womanish men, each of them the center of a circle of devoted female admirers and patrons.

The attempt to open up new paths of industry to woman, made by public-spirited individuals, seem worthy of a better fate than has generally attended them. The female schools of design, the plans to train woman to wood-engraving and other light and artistic work, have not succeeded for a variety of reasons, the chief being that the women are exceptional in the sex who do not look

forward to marriage and to a position at the head of a household as the natural aim and end of their life. This feeling has been ridiculed as an unworthy weakness, for some reason not stated by woman's censors. It is, on the contrary, an eminently natural and proper feeling. A few of the sex may find freer and fuller play in special vocations for which they feel an enthusiasm, but the average woman's truest place is where her peculiar gifts and powers are called into the highest activity—as the house-mother. That is the woman's kingdom and her true sphere of action, the place where she most contributes to human welfare, and best serves her kind. We have no purpose or design to disparage any other members of the sex, no desire to debar them from any work to which they are drawn by an inward call or driven by an outward necessity, but hats off, gentlemen! to the mothers of Christendom. Who shall measure their power as the apostles of sweetness and light, or dare to place above their gifts the highest inspirations of poetry or art shared by their exceptional sisters?

The great reform that society needs in regard to the use of this left hand, is to remove from woman's path the obstacles that are keeping her from worthily discharging this chiefest of her duties. First of all there is the deficiency of public opinion in regard to the worth and dignity of her office. The worldliness of society, its hollow cynicism, its worship of tangible results, its exaltation of life's means above its ends, are all against her. This false state of public opinion is the root of the agitation for a new sphere for the sex in the political world. So long as the family is looked upon as a lower institution than others, so long will their sense of the equality of the sexes impel the more courageous to push into the more honored lines of life and activity. Each of us that has in any way either acquiesced in or promoted the false views of this question, may fairly count ourselves among the promoters of the Woman's Rights movement. We are in so far responsible for it, whether we regard it with favor or disfavor.

A second obstacle to woman's true discharge of her work as the house-mother is the lack of liberal culture. We have an abundance, indeed, of the lower class of institutions for the education of the sex, in which the education is based on just two ideas. The first of these seems to be the Oriental one—that woman is meant to be man's amusement and plaything, and is

therefore best fitted for "her sphere" by what are called *accomplishments*, *i. e.*, superficial acquirements of all sorts that may fit her to "show off" in society. The second is from the eighteenth century, and it is that religion of the quiet, unquestioning, traditional kind, is a very good thing for women and children, who are therefore to be carefully drilled in moral common-places and religious platitudes. Institutions that take a higher ground than this, and really aim to evoke intellectual power and stimulate independent thought, are not too abundant to defy enumeration. The result is of the greatest possible credit to the sex; that they are not as a rule giggling, frivolous devourers of bad novels and imitators of slang and fast manners, is owing to the substantial substratum of good sense that the system cannot reach. Happily they mostly illustrate Jean Paul's notable lecture on the powerlessness of education. Why should not the future companions of the men of the race be able to avail themselves of the same course of mental training as their brothers? The country colleges answer very justly that the thing is impossible. Their bad inheritance of the monastic system of education forbids its trial. But every great American city possesses first-class institutions of learning, which could be opened equally to "the left hand of society" as to the right. Why should that hand be excluded? Their presence in many a class-room would be an immense power in developing courtesy and promoting refinement of manners, whereas at present the influence of the separate system is undoubtedly bad upon both sexes.* All experience shows that their presence by appealing to the sense of shame, would present a stimulus to

* Upon the more important aspects of the question we say nothing here except to recount an experience. It was the writer's fate to attend two public schools successively, of which the first had every external advantage over the second. It was in a quiet farming neighborhood, under a most excellent teacher, whose influence over the children was very decided. The other was on the skirts of a crowded manufacturing town, and was kept by a poor, weak, drunken fellow. But the first school kept the boys and girls separate, while in the second they sat on the same benches and recited in the same classes. To no other circumstance can we ascribe the fact that the moral tone of the second school was immeasurably superior to that of the first. We can testify from personal knowledge that the morality of the public schools of Philadelphia was fourteen years ago exactly what we would expect from the separate system.

study, which would be morally more noble than that now furnished by our very questionable system of emulation.

Lastly, woman needs release from an overplus of household work, that she may devote herself to the care and training of her children. At present they are hurried off to school at untimely years in order that the mother may have time to play the cook, etc. We speak of the great mass of American women, not of the few who have abundance of servants. Most women send one part of their work away from home, in order to devote themselves to the other part. At present they send out the most important—the care of their children—and keep for themselves that which is less so, and household education no longer exists save in name. Suppose, however, they were to reverse this, and send out their cooking and laundry work and keep the children at home. The proposition may seem absurd to us, but not more so than did to our great-grandmothers to give up spinning and leave it for the factories. Equally absurd did it appear to their still more remote ancestresses to leave weaving to the men and devote themselves to other duties. There was a long tradition in the race to the contrary. Before our ancestors and those of the old Romans parted company in the highlands of Central Asia, women had already earned the name of “weaver” (Sanskrit, *wa-man-as* (weaving); Latin, *fæ-min-a*; English, *wo-man*). Every step in woman’s subsequent rise has been through the removal of work from the homestead to some more fitting place, where it can be done in a manner more *secundem artem*,* and at the same time leave her time for other things. This movement would also furnish employment to vast numbers of women who would rather starve than enter service in a family, but would feel no such objection to the work of coöperative kitchens and laundries.

*Many details of the plans of such establishments will occur to the reader’s mind as decidedly advantageous. A better method of purchase, *i. e.*, in large quantities, would save the entire cost of the co-operative cookery, and a full knowledge of chemistry might be brought to bear upon the preparation of food. A Philistine suggests with a shudder, “Cold dinners!” but has never read of the simple and cheap Norwegian kitchen by which the French workman keeps his dinner at the boiling point without any fire for half a day. Think, too, of letting all the fires in the house go out at midsummer, and of seeing the house-mother sit down to dinner with an appetite unspoiled by bending over a cooking-stove.

In sum, all true reforms must be in the line of giving woman a chance to be more truly a woman, and ever more of a woman, and more fit for woman's most effective work, and not in making her mannish or calling her to undertakings that are not properly adjusted to her peculiar strength.

THE PHILOSOPHY OF THE FRENCH REVOLUTION.

BY PAUL JANET.

Translated from Revue des deux Mondes, by O. H. K.

THE HISTORIANS OF THE REPUBLIC AND THE CRITICS OF THE
REVOLUTION.

III.

THE time of the greatest exaggeration of the theories of the Revolution coincided with the last years of the government of July, and after that period they began a retrograde motion; the philosophy of the Revolution seemed to grow more quiet, and to have entered the domain of examination and criticism. It may seem strange to say that the revolutionary idea has grown quiet in our days, when, on the contrary, we have seen its most terrible effects; but we speak here of opinions, and not of acts, and particularly of the opinions of lofty theory and historical philosophy. Now, if it is true that the revolutionary passions and prejudices are as powerful as ever among the people, and still find organs in low political literature, we can still affirm that for the last twenty years these theories have ceased to produce serious and important works, and that the current of learned thought has flowed in a rather different direction, which is an important, and, to a certain extent, reassuring fact; for, if it is true that it takes considerable time for ideas, and particularly for wise ones, to descend to the level of the multitude, it is very certain that they always, in the end, penetrate more or less; and it is no less certain that movements of the people become fruitless when they do

not proceed from principles coming from a higher source. Jacobinism and socialism are doctrines born among men of letters, and if these doctrines do not find more support among the governing classes, there is reason to hope that their consequences will fade away and grow feeble with time. But whatever may be the fate of these, let us continue our studies and bring them down to the present time.

Socialistic Jacobinism being the most advanced form of the revolutionary philosophy, it is from this point we must start in returning to more just and moderate ideas. If opposition to false ideas is always useful, it is especially so when it comes from those who are nearest to its defenders, *e. g.*, the attack of a republican upon Jacobinism has much more authority than that of a conservative; for the latter is always suspected of being prejudiced, and justly so, for he does not make the necessary concessions, and being unjust on some points, is supposed to be so on all. He will willingly include in a common blame both Jacobinism and democracy, socialism and the republic, and thus will, unintentionally, fortify Jacobinism and socialism with all the real power that democracy and the republic can possess in the social state of our times. The republican, on the otherhand, in combatting Jacobinism and socialism, reduces these extreme sects to their own level, and takes from them the support of democratic principles. We shall be right, then, in presenting the republican historians of the Revolution who have kept themselves from Jacobinism, as having rendered to the cause of order and of liberty services more efficacious, perhaps, than the conservative historians. This is the common merit of two writers whose names are bound together by friendship, by the common origin of their celebrity, by their community of opinion, and the similarity of their points of view, MM. Michelet and Quinet, two names which appear as inseparable as those of MM. Thiers and Mignet, and who, as much as these, have applied themselves to the problem of the Revolution: the one a poet, the other a philosopher, both eminent writers, notwithstanding the mirages which too often carried away the imagination of the one, and the clouds which too often obscured the thought of the other.

It is astonishing that with his excessive imagination, M. Michelet did not more often make mistakes, and so frequently perceived

the historic truth with the most wonderful justice. His *History of the Revolution*, though fatiguing by its apocalyptic form, is full of just and striking views. No one has done more than he to extricate one of the essential, perhaps the chief, fact of the Revolution, *i. e.* : the peasant proprietorship, or at least the freeing of the peasantry, which he calls the marriage of "the earth and the man." No one has put in higher relief one of the most lively and deepest sentiments of the ancient society of France, a sentiment still warm in 1789—the love of the king. "I hear," says he, "this word come from the very heart of ancient France, tender and of profound accent: 'my king.'" And it is this very sentiment which explains the defiance and hate that followed; as he says, "when one has believed, has loved, and has been deceived in the object of love, there is no more belief left in anything." What M. Michelet has remarked particularly well, is the spontaneous and unanimous character of the Revolution at its start; and he says rightly, that what there is of good is the work of everybody, while the bad is that of some few. "The great social effects are produced "by forces, immense, invisible, and by no means violent." There was then a moment in history when the heart of man enlarged: it was the arising of a new sentiment in the world—humanity. The Revolution loved "even England," her eternal enemy. And, a fact still more astonishing, "the journalists made a truce." This sentiment of unity by the union of souls, goes with M. Michelet as far as pantheistic effusion, and he cries out as a Hindoo philosopher might: "Ah! 'if I were one' said the world! 'if I were one,' said mankind!"

Thus the Revolution was the work of all; not that of a sect or party. This lively sentiment of national unity which brightens up the Revolution is the refutation of the Jacobin theory, which sacrifices France to the glory of a few hierophants. For M. Michelet, on the other hand, the principal actor in the Revolution was the people, and "the ambitious puppets," who thought to lead it, should be restored to their proper level. As the people is the true actor, so it is the true judge. Hear him. Who corrupted the Revolution? Marat and Robespierre. The people "love Mirabeau notwithstanding his vices, and condemn Robespierre notwithstanding his virtues. Some say, 'The fellow has lost his mind.' 'Take care' is the judgment of the people."

But he retains from 1793 the opinion "that bloodshed is of no moment." But we must bear in mind that "the people" does not mean any of the popular classes, but the whole country.

To the false history which makes the sad quarrel between the *bourgeoisie* and the people begin at the very beginning, M. Michelet opposes rightly the union of classes in early times. Never, according to him, was the *bourgeoisie* self-seeking, never were its interests less separated from those of the workmen and peasants. Do not oppose fraternity to liberty, for it is that which can render fraternity possible, and nothing is freer than the fraternal sentiment. Just when the Revolution proclaimed the rights of men, "the soul of France, instead of contracting, embraced the whole world." The great human movement of our Revolution had for its author the people; while the motive power in the time of violence was composed of a very small number of men. Then the whole nation, without distinction of parties and almost without distinction of classes, marched under the fraternal banner.

Jacobinism was a narrow sect substituting itself for the nation. "The Jacobins had somewhat of the priests about them, and were, so to speak, a clergy of the Revolution." In the view of M. Louis Blanc, the Girondists represented the *bourgeoisie*; the Mountaineers, the people; than which nothing is more false, according to M. Michelet, who seems to us the true historian. The Jacobins were not less *bourgeoise* than the Girondists; "not a single one arose from the people." The unfruitfulness of the Girondists was not due to their *bourgeoise* quality, but to the fatuity of their advisers. The two parties each believed that they were very much above the people, and "both received their momentum from the educated." It is a great historical error to transport the social questions of our day to the period of the Revolution. They never would occupy higher than the second rank. Those who see socialism in all popular rising insult the people and lower them. "Wherever they see pillage and brigandage they say, it is the people." According to M. Michelet, the labor question did not then exist. New France, that of the peasant and the workman, was formed on two occasions; "the peasant was born of the shock of the Revolution and of the sale of the national property; the workman was born in 1815 and by the impetus

given to industry by peace." Leaving out the hyperbole, no doubt these lines express the truth.

If, however, M. Michelet combats the doctrine of socialistic Jacobinism with as much spirit as true historical feeling, he himself is under the empire of certain passions and prejudices which alter remarkably the justice of his views. He has two enemies, and, to use a common phrase, two *bêtes noires*: the priest and the Englishman. Just as they said formerly that everything was the fault of Rousseau and Voltaire, so for M. Michelet everything is the fault of the clergy and of England. They are the two melodramatic traitors who check in his history the impetus of its humanitarian mysticism. "A treacherous, hateful hand (the hand of death) was held out to the party of freedom, which, to please its enemy (the clergy), denied its friend (the 18th century.)" So much for the priesthood. England, on her side, deceived France "by her false ideals," and by the celebrity of her institutions, "local, special, insular."

We are astonished at our distance from the time when M. Michelet wrote those lines, at that hatred of the English, which has almost disappeared from our manners. English institutions are no longer the object of our hate, but rather of our envy. Where is the time when we believed we had the right to despise those institutions, and persuaded ourselves that we had passed them? When M. Michelet tells us, "The Englishman is a tool, the Frenchman is a man," we are not obliged to reject the second proposition; but who will now believe the first?

M. Michelet's deepest hatred, however, is not for the Englishman. It is for the priest. In his eyes the Revolution is essentially anti-Christian. There are but two great epochs in the history of Europe: Christianity and the Revolution; and these have, without doubt, a common source, the principle of fraternity, but the Revolution founds fraternity "on the love of man for man;" Christianity bases it on a common parentage, on a common descent, which from father to children, transmits as well the evil results of crime as the community of blood. In one word, Christianity is expressed in two dogmas: "original sin" and "grace." The Revolution is the "slow reaction of justice against the government of favor and the religion of grace." For example, the Revolution in abolishing the nobility

and hereditary servitude, protested against grace and original sin.

All this is very theological and arbitrary. The Protestant peoples who give large place in their theology to the dogmas of grace and of original sin, have nevertheless arrived, or at least some of them, at liberty and equality, *i. e.*, at the precise point aimed at by the Revolution. Doubtless the Revolution placed itself at a point of view which is not that of Christianity, *i. e.*, that of natural right of the natural liberty and equality of men, while Christianity, in its primitive sense, never understood liberty and equality from any but a religious point of view. It is as members of the kingdom of heaven, and not as inhabitants of this earth, that men can become free and equal. The kingdom of Jesus Christ not being of this world, it is not here below that the small can be raised and the great abased. It is in this way that slavery, serfdom and privilege in all its forms easily found their justification, and we can understand that the Church itself, without renouncing its principles, could take its place in this system of inequalities, more or less softened by Christian charity, and at the same time be supported in its essential principles by the idea that trial is the natural and legitimate condition of the Christian, and that it is necessary for the development of the patience of one and of the devotion of another.* To this austere and mystic point of view, too easily reconcilable with all the abuses

* We fear that there is much in the common teaching of Christian religionists that would coincide with this representation of the relation of Christianity to politics, but regard the view taken by M. Janet as false to history and philosophy. Christianity does not indeed attack the corrupt institutions of the political world directly. It assails them at the root rather than in the branches, attacking the tempers of mind and modes of thought upon which they rest. It makes the fruit good by reforming the root. But it differs from philosophies of the Revolution and similar systems of teaching simply in standing in a far closer and more vital relation to social institutions than they can. It began its historical career by overthrowing the corrupt and despotic Roman Empire. In later Europe it destroyed serfdom and established the freedom of the people in spite of the unfaithfulness of its custodians and representatives. It underlay every positive and vital conception of the Revolution itself. That it is a "kingdom not of this world" does not prevent its having to do with this world's kingdoms in all their relations. That expression was not meant to carry us forward to some indefinite future, nor upward to some mystical Zion beyond our skies, but inward to the true sphere of man's life, to the heart and the will from which are the issues of our commonest life. A noteworthy and profound view of the French Revolution from a truly Christian stand-point will be found in *The Kingdom of Christ*, by the late Rev. F. D. Maurice, pages 174-96 (Amer. Ed., New York, 1843).—EDS. P. M.

of despotism, the Revolution opposed that of the philosophy of the 18th century, *i. e.*, that men are free and equal as men and not simply as being brethren of Jesus Christ, that they ought to be able to use all of their faculties freely, and that on this earth and not in that mystic Jerusalem, whither they had always been adjourned before. This principle was, in fact, very different from the Christian principle and particularly from that formulated and arranged in the Catholic and Papal hierarchy.

However, no principle of this low world (even among those which are claimed to come from on high) is developed in practice with the abstract stictness of the theorists. Once admitted in the mind of man, the principles are there modified, tempered and rendered flexible, by common sense, by circumstances, by the heart of men, and by a thousand other causes, which forbid them from bearing all their consequences; so that if theoretically by one party the Christian dogma could favor and justify social inequality, according to another party it combatted and narrowed it continually. Whether it was in the name of charity or in that of pure right, whether it was as brothers in Jesus Christ or as brothers in humanity, makes little difference to the people's common sense, and but little difference to those generous spirits, who draw from these principles all the good they contain for men. It is thus that the principle of fraternity in conjunction with the necessary progress of human affairs, brings about a steadily increasing equality, and when, in the 18th century, the philosophers came to profess these principles, and the Revolution came to practice them, the Christians could have said with some reason that they were borrowing the principles from them. Doubtless, the crafty Catholic could have declared, as the philosophers did on their part, the opposition of Christianity to the Revolution; but besides that Catholicism is not the whole of Christianity, it always makes adaptations in practice which theory does not know. It is, then, exaggeration to present the antagonism of the two principles as absolute and irremediable, and M. de Tocqueville was right in saying that it was more in appearance than in reality that the Revolution showed itself anti-Christian. It did not exclude Christianity; but left it its open place among the moral influences, which operate in an enfranchised society.

The book of M. Edgar Quinet, published several years after

that of M. Michelet, presents itself with quite a different character. Between these two books there was a terrible epoch, 1852. Neither of the authors ceased to be believers, apostles, only in M. Michelet, the faith is still young, candid, whole; in M. Quinet, on the contrary, we see an apostle cruelly deceived, questioning with anxiety the very dogma he had preached up to that time, and, without ceasing to believe in it, saying to himself the most cruel truths. "A whole people," said he, "cried out 'Freedom or Death!' Why have men who knew so well how to die not known how to be free?" Such is the question proposed by M. Quinet in his book on the Revolution, a remarkable writing, full of fire and passion, of sadness and emotion, and of noble philosophy.

But the author by no means abandons the cause of the Revolution; he is perfectly willing to accuse it himself, and is the first to speak plainly to its heroes, but he will not leave to its adversaries the privilege of originating the criticisms he himself directs against it. It is in this manner that he defends the Revolution from the sophism that the revolutionary policy was a thing unheard of in the world, as if it had invented the principles of the rights of the state. They reproach it with its violent policy in reference to emigrants; did not Louis XIV. exile from France 200,000 Protestants? They reproach it with arbitrary arrests: were there not "*lettres de cachet*" under the *ancien regime*? They reproach it with odious massacres: were there not in the world a Philip I, a Duke of Alva, an Inquisition, a war against the Albigenses, and a Saint Bartholomew? The Revolution was doubtless at fault in having borrowed from tyrants their policy, but it is in the school of history that it learned this policy. If it had been an hereditary prince, served by a fawning court, surrounded by a silent people, how much would all the horrors which blood-stained and disgraced it have been excused and softened by tradition? On the contrary the Revolution, by serving its own processes, furnished arms to its adversaries. The process of Carrier, Fouquier Tinville and Lebon, were the Revolution, guiding, punishing and handing itself over to the vengeance of the future.

If the Revolution cannot be blamed with having invented tyranny, it may be for having used it, and it must besides be con-

fessed that the concentration of systematic tyranny, which reigned for eighteen months under the name of the Reign of Terror, was a fearful phenomenon, which confounds the imagination, revolts the heart, shakes violently all the cords of pity, and seems beyond the ordinary laws of politics and history. The causes and effects of this phenomenon are sought for by M. Edgar Quinet, in a very remarkable chapter of political psychology under the title of "The Theory of the Reign of Terror."

In the first place the Reign of Terror was an accident; Robespierre and Saint-Just changed its system, from a shortlived infatuation the terrorists made the spirit and temper of the Revolution. Another cause was the scorn of individuals, the sad legacy of ages. The Revolution was then a sort of abstract being, an idol who needs nobody, which can without injury to itself swallow up individuals one after another, and grow by the destruction of all. "As well might we say, that men may be destroyed without injury to humanity." This strange theory led the Revolution to always make a clear space around her without perceiving that she was destroying herself. It will hardly be believed that the third cause was Philanthropy. The revolutionists brought up in the school of Jean Jacques Rousseau believed that man and the people were naturally good, but, as evil existed, there was treason and conspiracy. They attributed to the human will what was the result of the nature of things. "If you could see down into the hearts of the terrorists, you would find a far different spectacle, for not only did the half-subdued past roar around them, but they were part of it themselves; they were unconscious accomplices of the conspiracy they denounced."

Such were the causes of the Reign of Terror; what were its consequences? The first is that a system of terrorism can have no end. It must be kept up or the terrorist will perish; for barbarity continually creates new enemies, who are always on the watch for an occasion to rise up; and further, when men are once accustomed to be led by fear, you can never get anything from them in any other way. The Reign of Terror is defended by the necessity of saving the Revolution, and its success is called up to justify the means; but where is this success? "Torture was necessary to safety, and now I ask with posterity after an experience of eighty years, what worse could have happened to us?" They had a

Reign of Terror in the Middle Ages under the name of the Inquisition, but why are men more indulgent toward it than the later one? Is it because the terrorists placing their ideal on earth and promising immediate felicity for all, the lie given by the reality to their promises was too glaring. Every body knows that the city of Saint-Just was not realized, and that his *auto-da-fe* were fruitless; while the city of St. Dominic and of Sixtus V. was beyond mortal sight.

To be continued.

MERLIN AND HIS TIMES.

"The fiends do quake when any him to them does name."—*Fairie Queene*, 3, 3, 11.

THE wealth of legend which exists in the literature of the Welsh is really surprising to one acquainted only with the plodding, practical, matter-of-fact habits of the people. Some of the legends respecting their early heroes have a strong resemblance to the fables of the Grecian and Hindoo mythologies. The Arthurian legends, however, are much better known, and have had no inconsiderable influence upon the romantic literature of Germany, Italy, and especially that of France; while our own heritage of the English language is constantly enriched by additions flowing indirectly from the same source. Chaucer, Spenser, Drayton, Wordsworth, Scott, Bulwer, and Tennyson, have all drawn more or less extensively from this quarter.

Merlin, although a prominent personage in some of the Arthurian legends, is almost unknown to the general reader, except by name, and that mostly through the medium of the *Idyls of the King*. The earliest accounts of him are to be found in Geoffrey of Monmouth, Nennius and Matthew of Westminster. There are those, however, who strive to prove that the first two chroniclers named have compiled, upon a very slight substratum of truth, a mass of gossiping fables, which succeeding writers have copied. Still, the indubitable fact remains that there was such a person as Merlin, and that he for several hundred years held a noteworthy

sway ovet the minds of his countrymen. It is not my design in the present paper to endeavor to disentangle the real from the unreal, but to gather, as far as I am able, all the facts recorded in history and legend concerning this celebrated seer, poet and enchanter.

We begin some years prior to his appearance on the stage. One of the kings of Britain in those early times was Constantine the Deliverer, who freed his country from the ravages of the Picts. After reigning prosperously for some years he died, leaving three sons, Constans, who had entered a monastery, Aurelius Ambrosius, and Uthyr Pendragon. Vortigern, a powerful noble, lord of Erging, in North Wales, to further his own designs, took Constans out of his retreat, and as no priest could be found willing to crown the whilom monk, he performed the ceremony himself. Afterward, when his plans were fully matured, Constans being of a weak and rather imbecile nature, he had him assassinated in order to usurp the kingly power for himself. He then invited the Saxons to come and aid him in establishing himself in the kingdom. He married Rowena, daughter of Hengst, the Saxon chieftain, called by the Welsh *Alis Ronwen*. It was by means of this alliance, and the great love which Vortigern bore to his wife, that the Saxons so easily gained such a foothold in the island. This Vortigern, who is called by the Welsh *Gwrtheyrn Gwrthenan*, is celebrated in the *Triads* as one of the three arrant traitors of the Isle of Britain, by whose treachery the *Kymry* lost the sovereignty of England.

In the meantime, Aurelius and Uthyr, who had fled into Britany or Lesser Britain, made preparations to come with an army and drive out Vortigern and the Saxons. Vortigern was now advised by his magicians to build a strong tower in which to defend himself against them. He selected as the site *Dinas Emrys* in North Wales, and began to lay the foundation of the castle *Gemeron* or *Gwayneren*; but, singular to relate, what the masons accomplished during the day, was swallowed up by the earth during the night. The magicians were consulted as to the cause of this strange phenomenon, and they, to evade the imputation of ignorance, counselled, as they thought, an impossibility, viz.: that Vortigern should procure a boy born without a father, who when found should be killed, so that his blood sprinkled upon the stones

and mortar might prove efficacious in resisting the spell which seemed to have been placed upon the building.

After many days' fruitless search, the king's messengers came to Cærmarchen (Cærmryddin), in South Wales, so-called, say say some of the fables, from the *myrdd ddin*, or ten thousand men who were there. In passing through the streets of the city they overheard two youths quarreling, one of whom, Dinabutus, taunted the other with, "Why do you contend with me, you fool? Can you, who were born without a father, pretend to rival my nobleness, who, being born of the royal family, am illustrious on both sides of the house?" On further inquiry the messengers found that it was as the youth had said. It was commonly reported in the city that Merlin was born of a spirit and the daughter of Demitius, king of South Wales, and that his mother now lived "a votaresse in the citie," in a nunnery belonging to the Church of St. Peter. This strange account of the birth of Merlin is not without a parallel, for we learn that Plato and other heroes of antiquity, owed their being to some similar mysterious origin. St. Dubricius and Taliesin had no visible father. This circumstance led to a confusion in the story of Merlin and Taliesin. The latter himself says, "Iddow and Heidid call me Merddin." Mr. Nash, in his "Bards and Druids of Britain," has the following: "We should be tempted to assign this quality of 'son of a virgin' to Christian ideas, though a similar mysterious origin has no doubt been ascribed to their heroes by other nations before the date of the Christian era."

But to return to Merlin. When he and his mother had been taken into the presence of the king, and the lady had acknowledged the mysterious birth of her son, Vortigern told Merlin why he had sent for him; whereupon Merlin ridiculed the pretensions of the would-be wise men, and desired that they should be brought before him. He then propounded to them various questions which they were unable to answer, and so proved that they had devised a subterfuge to serve as a cloak for their ignorance. Merlin told the king that under the foundation of his castle there was a pool of water and at the bottom of this were two hollow stones in which were two dragons asleep. The pool was drained and Merlin's words were found to be true. When the dragons awoke they commenced to fight furiously, and this it was that had occasioned

the earth to give way and swallow up the foundations of the building. That evening as Vortigern sat by the edge of the pool, the red dragon, after having been several times routed and almost killed, eventually drove out the other dragon, which was white. Vortigern appealed to Merlin to know the meaning of this. Merlin began to weep bitterly and told the king that the red dragon symbolized the British, and the white one the Saxons; that he, Vortigern, should lose his crown and the Saxons be driven out of the kingdom. He also foretold the coming of Arthur, the glory and magnificence of his reign, of his victories over the Saxons, Romans, and those who love "the flower de Lyces plant," the Norman invasion, when

"Iron men in wooden tents shall here arrive,
And hence the Saxons with eglets drive."

The following is part of the prophecy uttered by Merlin at this time, as given by Heywood,*

"Woes me for the red Dragon for alack,
The time is come, he hasteth to his mack;
The bloody Serpent (yet whose souls are white),
Imply the Nation, on which thy delight
Was late sole-fixt, but ayming a' shrewd ends
They shall have power over the drooping red,
In which the British Nation's figured;
Drive shall he them into caves, holes and dens,
To barren mounts, and to moorish fens,
Hills shall remove to where the valleyes stood,
And all the baths and brooks shall flow with blood.
The worship of the holy God shall cease,
For in thilke days the Kirke shall have no peace.
The Panims (woe the while) shall get the day,
And with their Idol mammetry beare sway,
And yet in fine shee that was so opprest,
Shall mount, and in the high rocks shall build her nest.
For out of Cornwall shall proceed a Bore,
Who shall the Kerke to pristine state restore.
Bow shall all Britaine to his kingly becke,
And tread he shall on the white Dragon's necke."

"By the Bore which should come out of Cornwall is meant the invincible Arthur, who vanquished the Saxons and subdued them

*"Life and Prophecies of Martin" by Thos. Heywood, London, 1641.

in many Battailes and was a great maintainer and exalter of the true Christian Religion."

"Uneasy his the head who wears a crown." Before this time, the Britons, being enraged at him for calling in the Saxons, had deposed him and placed his son Vortimer in his stead. Vortimer was soon after poisoned by his stepmother Rowena, and Vortigern was restored to the throne. A meeting was arranged between the Britons and Saxons, to take place near the monastery of Ambrius or Amesbury. It was agreed that both parties should go unarmed, but the Saxons hid their weapons in their sleeves, and at the command, "Nimed eure Seaxers," fell upon the British and massacred over three hundred of them, so that the very flower of the Cymric nobility were slain.

"Three hundred lords he slew,
Of British blood all sitting at his borde;
Whose doleful monuments who list to rew,
The eternal marks of treason may at Stoneheng vew."

FAIRIE QUEENE.

This treachery is called in the Welsh Triads, the Plot of the Long Knives; or, "Twyll y Cylyll Hirion," and is said to have taken place on May-day, 472. In some parts of Wales there is still a custom of kindling large fires (Coelcerthi), on the eve of November, to perpetuate the memory of this tradition.

Harassed and driven almost to despair, Vortigern, being forbidden to build his castle of Gemonon, retired to another stronghold where Merlin devised various means to divert him from his melancholy. Nennius informs us that this castle either took fire or else was miraculously swallowed up by the earth, so that all who were in it perished, among them the perfidious monarch, who thus received the reward of his treachery.

After his nephew Aurelius Ambrosius (Emrys Wledig) had been crowned king of the Britons, he went to *Caer Caradawg* (Salisbury), to view the place where lay the remains of those who fell victims to the treachery of Hengst, and was moved with grief and pity, that no monument had been erected to their memory. Being anxious that such a memorial should be set up, he sent for all the artificers in his realm, who advised him to send for Merlin. Accordingly Merlin was brought before the king, when he told him to send to Mt. Killard in Ireland for the Giants' Dance. Upon this

Ambrosius burst into a loud laugh, and said: "Are the stones of Ireland, so much better than the stones of this country, that they must need be brought from such distance into Britain?" But Merlin reproved him, and said: "Do not indulge, O king, in unwise laughter; for they are mystical stones; and wholesome as cures for different diseases. The giants brought them over from the most remote districts of Africa, in order to make baths of them here for themselves when they were attacked with various infirmities. For they washed the stones in various confections of herbs and formed them into baths in which the sick were cured. Nor is there one stone which has not some medicinal property. When Ambrosius heard of the wonderful virtues which these stones possessed, he was exceedingly anxious that they should be brought over without delay. His brother Uthyr Pendragon was placed at the head of 15,000 men, and, accompanied by Merlin, they set sail for Ireland. Having arrived at that part of the country where the gigantic structure was set up, they completely routed the army of king Gillomanius, who was disposed to resist them, and then betook themselves to remove the stones; but with all their strength they could accomplish nothing, until Merlin brought his machines and with the greatest ease carried them over to Britain in a whirlwind. But listen to Geoffrey's account of it. "Having found the structure, from joy they fall into admiration, and standing all of them around gaze at it, and Merlin draws near, and thus bespeaks them: Use now your utmost strength, young men, that in taking away these stones, you may discover, whether art to strength, or strength gives place to art. At his command, therefore, they bring several sorts of engines, and address themselves to pulling it down. Some ropes, some cables, some had made ladders ready, that what they so much desired might be effected, but in nowise able to achieve their purpose. All of them tired, Merlin breaks out into laughter and provides his engines. Lastly when he had all things in readiness, hardly to be believed it is with what facility he took them down; being taken down, he caused them to be carried to the ships and embarked, and so with joy they began their return toward Britain." Then upon the occasion of setting up this "*Lapidum congeries admiranda*" on Salisbury Plain, the king proclaimed a national holiday throughout the Kingdom.

The stones were placed in the same order as they were on Mt. Killard, in Ireland, upright in three circles, one within the other, while on their tops were set others at right angles, which occasioned the bestowal upon them of the name Stonehenge (hinge). And this is all that is known of this stupendous and wonderful work which the Cymry call *Chor Gawr*, or *Kor y Kewri* (Lat. *Chorea Gigantum*, French *Danse des Geants*), and which in their Triads is enumerated as one of the three Mighty Achievements of Britain—*Gwaith Emrys*. It has not ceased to challenge unusual wonder and admiration; and the speculations as to who were its founders and what was their design, have been as numerous as those respecting the pyramids of Egypt. It does indeed test our credibility when we think of the vast size of the stones and the nice art by which one was made to rest upon the other, and all done without any of the contrivances and appliances of the machinery of modern times. By some authors it has been supposed that Stonehenge was erected as the tomb of Boadicea, Queen of Iceni, while Inigo Jones in his "History of Stonehenge" tries to prove that it is the remains of a Roman temple. In a play sometimes ascribed to Shakespeare, Merlin is represented as saying to his mother:

"When you die, I will erect a monument
Upon the verdant plains of Salisbury,
No king shall have so high a sepulchre,
With pendulous stones, that I will hang by art,
Where neither lime nor mortar shall be used—
A dark enigma to the memory;
For none shall have the power to number them;
A place that I will hallow for your rest,
Where no night-hag shall walk, nor were-wolf tread,
Where Merlin's mother shall be sepulchred."

After the death of Ambrosius, his brother Uthyr Pendragon became king, and upon a certain day all the nobles of the kingdom were assembled at his court. Among others there were Gorlois, duke of Cornwall, and his beautiful wife Igera or Igraine. Her exceeding loveliness so bewitched the heart of the king that he fell madly in love with her, and Gorlois perceiving this, made all haste to return to his home. Uthyr, incensed that Gorlois should presume to depart without his permission, pursued him and besieged him in his castle of Tintagel, on the Cornish coast. And

now, again, we hear of the magical arts of Merlin. By them he succeeded in transforming Uthyr into the semblance of Gorlois, and himself and Ulphin into the likeness of two trusty attendants of Gorlois. Thus disguised, they obtained easy access into the castle. Uthyr became the father of the renowned Arthur, and after the death of Gorlois, married Igera. Arthur was born the night Uthyr died, and Merlin took charge of him and entrusted him to the care of the hermit Blaise, "who nourished him through all his youth and brought him up from infancy." Then when it was right and lawful that Arthur should succeed his father in the kingdom, Merlin brought him forth from his obscurity, but the knights rebelled against him, saying:

"Who is he
That he should rule us? Who hath proven him
King Uther's son? For lo! we look at him,
And find no face nor bearing, limbs nor voice,
Are like to those of Uther whom we knew.
This is the son of Gorlois not the king."

But through the aid of Merlin, the cause of Arthur triumphed. By several acts he proved to the recalcitrant nobles that Arthur was their rightful lord. Merlin commanded that whoever should succeed in drawing out a sword that was fixed fast and deep in a stone, should be declared the lawful king. Arthur performed this feat, which no one of the knights could do.

It was Merlin that guided Arthur to the mere where dwelt the lady of the lake, and counseled him to take from her the famous sword Caliburn with which he committed such havoc against the Saxons.

When Arthur sent to King Levdogran for the hand of his daughter Guinevere, the king hesitated long before he could give up his daughter to any one saving "a king or a king's son." In his perplexity he inquired of his chamberlain if he knew aught of Arthur's birth.

"Then spake the hoary chamberlain and said,
'Sir king, there be but two old men that know;
And each is twice as old as I; and one
Is Merlin, the wise man that ever served
King Uther through his magic art; and one
Is Merlin's master (so they call him) Bleys,
Who taught him magic; but the scholar ran

Before his master, and so far that Bleys
 Laid magic by, and sat him down, and wrote
 All things whatsoever Merlin did
 In one grand annal-book, where after years,
 Will learn the secret of our Arthur's birth."

After this, the words of Sir Bediven, and of Arthur's sister, "Lot's wife, the Queen of Orkney, Belicnet," settled all doubt in the mind of the king, and Guinevere was given to Arthur as wife. It was as some of the chronicles say, to please his queen Guinevere (Gwenhwyvere) that Arthur set up the round table at his court, in which he was aided by Merlin, who appointed one seat at it called Siege Perilous for him who should find the Holy Grail. Merlin also built for Arthur a spacious and magnificent palace, on the windows whereof were blazoned the twelve victories which he gained over the Saxons. In many ways Merlin proved a wise and faithful counselor to the king, so that it is scarcely to be wondered at that in the quaint words of Sir Thomas Mallory, "For the most part of the dayes of his life, he was ruled by the counsaile of Merlin."

But the humiliating fact remains, that

"He was by a woman overreached
 That unto others prophesied and preached."

In his old age he fell into a "dotage of love" for the lady of the lake and they both departed and went across the sea into the land of Benwicke, and "alwaies Merlin lay about the lady to have her favor and she was ever passing wery of him, and faine would have been delivered of him; for she was afraid of him because he was a divell's son, and she could not put him away by no meanes; and so upon a time it happened that Merlin showed to her in a rocke whereas was a great wonder and wrought by enchantment which went under a stone, so by her subtle craft and working she made Merlin to go under the stone, to let him wit of the marvailles there. But she wrought so for him that he came never out, for all the craft that he could doe." Ariosto makes use of this in fable the Orlando Furioso.

"Here is the tombs that Merlin rest did make,
 By force of secret skill and hidden art,
 In which sometimes the lady of the lake,
 (That with beauty had bewitched his heart),
 Did force him enter for her sake."

Again,

"His carkas dead within this stone is found."

Harrington's Translation.

In another romance we read that after coming into the land of Benwicke, into the forest of Broceliande, Merlin and Vivienne sat down under an oak tree, and the lady, by means of her kisses and endearments, so wrought upon her lover, that at length, though after long hesitation, he told her how men might be shut up alive in rocks or trees; and so while he was asleep, "she rose up softly and walked about him waving her hands and muttering the charm, and so presently enclosed him within the tree whereby he slept."

"Then in a moment she put forth the charm,
Of woven paces and of waving hands,
And in the hollow oak he lay as dead,
And lost to life, and use, and name and fame."

Tennyson represents Vivienne as having left the court of Arthur through pique and mortified vanity, as

"It made the laughter of an afternoon,
That Vivienne should attempt the blameless king;"

and now being anxious to heal her wounded pride, she sought to work the charm on Merlin, as her victory would be greater, according to the greatness of him "whom she quenched."

It would be an endless task to attempt to reconcile the different versions of the story of Merlin's disappearance, as each poet and romancer has made use of considerable license in embellishing it. Spenser represents Merlin as building a huge wall, when he was beguiled away and entrapped by the wily Vivienne.

"Then the wise Merlin whylome went (they say),
To make his wonne, low underneath the ground,
In a deep delve, farre from the vew of day,
That of no living wight mote he be found,
Whereso he counseled with his sprights encomp'st round.

"A little while before that Merlin dyde, he did intend
A brazon wall in compass to compyle,
About Cairmardin, and it did commend
Unto these sprights to bring to perfect end;
During which time the ladie of the lake,
Whom long he loved, for him in haste did send,
Who therefore forst his workmen to forsake,
Them bound till his return their labor not to slake,
In the meantime, thro' that false ladie's traine,
He was surprised and buried under bean,
Ne ever to his work returned againe."

FAIRIE QUEEN.

In the French romances, it is a bush of hawthorne in which Merlin was inclosed by his mistress, who not being believing in the spell tried it upon her lover to ascertain if it were true and then was grieved because she could not extricate him from his throny coverture.

By some it is supposed that there were two distinct persons by the name of Myrddin—our Merlin of romance, who was styled Myrddin Emrys, after his patron Emrys Wledig or Aurelius Ambrosius, Ambrosius being the Latin form of Emrys; and Myrddin Wyllt or the Wild, who it is said was a native of Caledonia. After the battle of Arderydd, where he had the misfortune to slay his sister's son, he fled from the society of men and wandered about in the forest of Celyddon, whence his name the Wyllt or Wild. In the "Avallenan," attributed to Myrddin, are the following lines:

"Alas, my woeful doom! hope have I none,
For Gwendydd's son is slain by my accursed hand."

Mr. Stephens, the author of "*Literature of the Cymry*," as well as other good authorities, is of the opinion that the two were one and the same person, while it is thought that his disappearance in the forest of Celyddon led to the fable of his being enchanted by the charms and spells of Vivienne who had learned them from him.

The very name Vivienne is modified by the French romancers from the Welsh *Chwifleian*, a female who appears and disappears. She was called "Lady of the Lake" because she dwelt in a palace which was situated in the midst of an imaginary lake that appeared and disappeared like the mirage of the Eastern deserts, and so continually deluded those who would have approached it.

In the Welsh Triads the mysterious disappearance of Merlin is spoken of as "one of the three Losses by disappearance of the Isle of Britain." It is there said that he went to sea in a house of glass, with his nine scientific bards and never returned. Another story, not at all agreeing with any of those given above, is that near Cærmearthen in South Wales, is a hill called Merlin's Hill, and which pointed out as the burial place of Merlin the Seer.

It is rather to be wondered at, that Shakespeare did not make this famous enchanter the subject of a drama. The giants, sprites, magic and other supernatural agencies would have afforded such fine scope for his genius.

What a grand old figure the Magi "with his hundred winters" would have made upon the page of the immortal bard. Indeed in his works there are but very few allusions even to these old legends. In *King Lear* the fool is made to say, "This prophecy Merlin shall make, for I live before his time"; and in *Henry IV.* there is an allusion to Merlin, which will be noticed further on.

In the "*Bridal of Triermain*," Sir Walter Scott paints a fine picture of Merlin using his magical powers upon the daughter of Arthur. The knights of the court were engaged in a contest, the prize of which was the gift of the hand of the fair lady herself; and the signal for ending it was the lowering of her hand. But the proud beauty, willing to gratify her love of power, refused to give the sign until many of the champions were lying dead and dying on the field. The combat was ended only by throwing her into a charmed sleep, from which only the kiss of some brave knight could awake her.

" Sternly the Wizard Prophet eyed,
The dreary lists with slaughter dyed,
And sternly raised his hand :—
' Madmen,' he said, ' your strife forbear !
And thou fair cause of mischief, hear
The doom thy fates demand !
Long shall close in stony sleep
Eyes for ruth that would not weep ;
Iron lethargy shall seal,
Heart that pity scorned to feel.'

" As Merlin speaks, on Gyneth's eye
Slumber's load begins to lie ;
Fear and anger vainly strive
Still to keep its light alive.
Twice with effort and with pause,
O'er her brow her hand she draws ;
Twice her strength in vain she tries,
From the fatal chair to rise ;
Merlin's magic doom is spoken,
Vanoc's death must now be wroken.
Slow the dark-fringed eyelids fall.
Curtaining each azure ball,
Slowly as on summer eves
Violets fold their dusky leaves.

"And so lovely seemed she there,
 Spell-bound in her ivory chair,
 That her angry sire repenting,
 Craved stern Merlin for relenting,
 And the champions for her sake,
 Would again the contest wake;
 Till in necromantic night,
 Gyneth vanished from their sight."

We will now consider more particularly Merlin as a prophet and poet. As we have already seen his predictions were clothed in poetic form. There exist the *Kyvoesi*, or conversations between Merlin and his sister, in which is given a list of the British kings, the *Hoianau*, a number of stanzas addressed to the pig, the type of the Welsh people, each one commencing with *Oianaw a phorcelan* (Listen, little porker), and enumerating the woes which should happen in Britain; the *Avallenau* and *Gorddodau*, each containing predictions of Britain's future greatness, when Arthur and other heroes should succeed in driving the hated Sassenach out of the land. It must be confessed that many of these predictions were in the highest degree vague and mystical, and like the obscure responses of the ancient oracles, might, after the occurrence of the events which it was pretended they foretold, be made to fit either way. However, they were very often the means of making the Welsh princes forget the petty animosities which so often moved them, and of inspiring them with the greatest unanimity and enthusiasm in making common cause for the restoration of the ancient liberties of their country. Again and again, after producing and brooding over these dark and enigmatical visions of their great seer, did they rise animated with renewed hope, that one of their ancient heroes would appear and lead them to victory. At times this belief amounted almost to fanaticism, which would be heightened by the slightest advantage on their part, and accounts for the repeated revolts of the Welsh in the reigns of Henry II., Edward I., and Henry IV.

We give a few specimens of the prophecies from the *Avallenau* (Apple trees.)

"Sweet apple tree! of richest fruit that growest
 In solitary woods of Celeyddon,
 All seek thee for thy fruit, but seek in vain
 Till Cadwaladr to Rhyd Rheon come

For conference and Cynan shall advance
 Against the Saxons, then shall victory crown
 The Britons, led by their graceful chief;
 Who shall restore to every one his own;
 And by the song of gladness is proclaimed
 The song of peace and days of happiness."

" Their magnificent kingdom
 Through many ages shall be lost to the Britons;
 Till in his car shall Cynan come from Britain the Lesser,
 And with him Cadwaladr, honored Cambrian leader."

" Yet shall my prophetic song announce the coming again
 Of Medrawd, and of Arthur, leader of hosts;
 Again shall they rush to the battle of Camlan,
 And only seven escape from the three days' conflict.
 Let Gwenhwyvar remember her crimes
 When Cadwaladr takes possession of his throne again,
 And the religious hero leads his armies."

This belief in the reappearance of an ancient hero as a natural deliverer is not peculiar to the Welsh. The Germans long believed that Charlemagne would some day awake from his charmed slumber to avenge their wrongs, and unite them in defense of their country; also in the cavern of the Rutli, Tell and his associates only await the proper time to issue forth and stand up for the liberties of Switzerland. The same legend occurs in some form or other in Spain, Portugal, Scandinavia and other European countries. Arthur, with his knights around him, lay under a hazel tree on Eryri (Snowdon), in North Wales, all resting on their shields and spears. Most of the romances say that after being wounded at the battle of Camlan, A. D. 542, Arthur was borne away to be healed of his wounds in the fairy land of Avallon, and as Heywood remarks in the work before quoted, " he who shall go into Brittany and shall proclaim that Arthur expired after the ordinary manner of men, most sure he shall be to have bitter and railing language asperst upon him, if he escape a tempestuous shower of stones and brickbats."

In A. D. 1278, Edward I. and his Queen Eleanor went to Glas-tonbury to discover the remains of Arthur and then reinterred them with great pomp and ceremony, thus hoping to convince the Welsh of the futility of conducting in the future any more rebellions in the name of Arthur.

This firm conviction of the Welsh that the predictions of Merlin would all be fulfilled, was sometimes taken advantage of by the English in order to further their own ends. For instance, in the reign of Henry IV., the disaffected earl of March joined his forces with those Owain Glyndwr, so as to strengthen himself against the king.

Harry Hotspur, it seems, was often moved to wrath by pretensions of Glyndwr, and when remonstrated with, impatiently cried out.

"He angers me
With talking of the mold-warp and the ant,
Of the dreamer Merlin and his prophecies,
And of a dragon and a finless fish,
A clip-winged griffin and a moulten raven,
A crouching lion and a ramping cat,
And such a deal of skimble skamble stuff,
As puts me from my faith."

Others as well as the impetuous young Percy depreciated the prophecies of the great bard and set a higher value on those of Taliesin, for we hear one saying :

"A rotten straw I would not give,
For a thousand of Merlin's words."

But the honor of the seer has been abundantly vindicated—many learned and elaborate commentaries and treatises have been written to prove that nearly every important event in the history of England, the Norman invasion, the deposition of Richard II. and usurpation of Henry of Lancaster, and many others have taken place in strict accordance with his words; and that when the house of Tudor, a race of Welsh princes, ascended the throne of England, then was fulfilled the prophecy that Britain should again bear rule in the land from which she had been driven out, not by force, but by stratagem and treachery. And here it may be remarked that it was by a statute of Henry VIII. that Wales was finally incorporated with England; and by the same act the privileges which of right belonged to the natives of England were given to those born in Wales.

Several times reference has been made incidentally to the Triads—that curious and unique collection of facts relating to the mythology, history, jurisprudence and morals of the Welsh people.

One more may be given, as it claims Merlin as one of the three primary baptized Bards of Britain.

A very thorough and exhaustive work by the Vicomte de la Villemarque, "*L' Enchanteur Merlin, Son Histoire, Ses Œuvres, Son Influence*," treats of Merlin as a mythological, real, legendary, poetical and romantic personage. I do not know whether any English translation of this work exists or not; if not, then any one rendering it into our language would confer a boon on English literature.

"*My yw rhyfeddod, ni wyr neb fy hanfod.*"

"I am a miracle, no one knows my history.

M. A. LLOYD.

PHONETIC LAWS AND THEIR LIMITS.

THE conception that phonetic changes are regulated and controlled by laws, is one of recent origin, an outgrowth of the modern school of philology. Not as if formerly all changes of sound, which the history of words discloses, had been considered as casual and indiscriminate; it required neither much learning nor sagacity to discover that letters turn most readily into those which are similarly articulated. But this observation led merely to a theory of "interchangeable letters," which, in conjunction with the well-known etymological figures of syncope, apocope, prosthesis, etc., formed for a long time the dangerous arsenal of etymological knight-errantry. Thus the learned Wachter, in his *Glossarium Germanicum*, published 1737, in the introduction lays down the neat rule that "cognate letters easily attract each other and easily exchange with each other" (*facile permutantur*), supporting it with numerous examples, on the whole judiciously chosen.

Among them not a few quite correct correspondences are pointed out, e. g., *frater* and *bruder* (brother), *ferre* and *bear*, *cannabis* and *hanf* (hemp), *caput* and *haupt* (head), *zwerch* and *dwarf* *χολή* and *fel*, *χειμα* and *hiems*, *θύρα* and *fores*. But no attempt is made to bring these facts into anything like a system; the permutation theory knows only an exchange of letters, a swaying between

similar sounds, sometimes in one direction, sometimes in another. Still more helpless were the older linguists in dealing with the probable causes of the change, omission and occasional accretion of letters. While Varro keeps on the safe side, making "age" responsible for so much havoc (*vetustas pauca non depravat, multa tollit*), the proud erudition of a later time was inclined to charge the whole mischief to the stupidity of the rabble. Thus a writer of the last century (approvingly quoted by Wachter), while commenting on the many pathological affections of words (apocope, etc.), exclaims with much warmth: "Not a senate of grammarians, not a congress of the learned, have reduced language to its present condition, but an ignorant, mad and ungovernable rabble. It is this tyrant, more relentless and brutal than a Nero or Busiris, that has maimed, slashed and mangled (*mutilavit, laniavit, excarnificavit*) the innocent words in a strange and fearful manner, racked and distorted them, while the learned have not even the right to resist."

Considerable progress toward the recognition of regularity in phonetic changes was made by Kanne, Jean Paul's genial but erratic friend, who published, in 1804, a book on the relationship of Greek and German, and still more by the learned Erasmus K. Rask, through his "Investigations into the Origin of the old Icelandic Tongue," published 1818. The latter, comparing the two classical languages with the Icelandic, established the correspondence of Graeco-Latin *p* with Icelandic *f*, of *t* with *th*, of *k* with *h*, of *d* with *t*, of *g* with *k*, of *ph* and *f* with *b*, of *th* with *d*, of *ch* with *g*. (See Raumer: *Geschichte der germanischen Philologie*, 1870, p. 513). Then came Jacob Grimm, and pointed out not only the parallelism of all these changes, but also the fact that the same phonetic rule which connects the classical stage of sound with the Icelandic and Gothic, again bridges the Gothic and High-German. And here we meet for the first time with the distinct enunciation of a *Law* in the domain of etymology.

As it is not intended to dwell on the details of Grimm's system of *Lautverschiebung* (shifting of sounds), it will suffice to repeat here its abstract formula, leaving out of sight all deviations and particular exceptions. Calling the antique stage (Sanskrit, Greek, Latin), the first grade, the Low-German (Gothic, Icelandic, Anglo-Saxon,) the second, the High-German the third, and retaining

the time-honored names of smooth, middle and rough for the divisions of mute letters, we have the following table:

1. <i>Grade</i>	Smooth	Middle	Rough.
2. <i>Grade</i>	Rough	Smooth	Middle.
3. <i>Grade</i>	Middle	Rough and Sibilant	Smooth.

The corresponding changes will be found by reading the columns in a downward direction, an example for the first column being Latin *tu*, Gothic *thu*, German *du*; for the second, Latin *duo*, Gothic *twa*, German *zwei*; and for the third, Greek *θύγάτηρ*, Gothic *dauhtar*, German *tochter*.

The fruitful researches of Jacob Grimm, Franz Bopp and their co-laborers soon gave to the study of phonetics a very prominent place in the science of language. Phonology, as this new branch was called, became, in fact, the very foundation on which etymology was reconstructed; it bears to the analysis of language a relation similar to that which organic chemistry and microscopic anatomy bear to the branches which treat of the structure and functions of organic bodies. The unsafe custom of applying vague and general rules to all languages alike was superseded by a method carefully discriminating between different fields. For as languages differ in vocabulary and grammatical structure, so they do in their phonetic peculiarities. Two tongues so nearly allied as German and English, are remarkably independent of each other in their method of dealing with questions of euphony. The German word *gneiss* is called in English *nice*, as the Romans said *notus* for *gnotus* and *nixus* for *gnixus*. The transition of *s* into *r* is in Latin of common occurrence (*ara* for *asa*, *eram* from root *es*), while in Greek *s* has a tendency to drop out between vowels. Such peculiarities, dependent on certain habits of articulation, may sometimes reappear on entirely different ground, as, for instance, the change of *s* into *r* is common in the Norse languages, and even found in English. (Comp. *was* and *were*, *hare* with Gothic *haso*.) But it would be wrong to assume, because a change has been effected in one language, that it is legitimate in another. In Italian the combined letters *ct* readily turn into *tt* as in *petto* from *pectus*; this fact, however, cannot be used to prove that *αἰτῖα* stands for *αἰτῖα* (coastland), for in Greek no assimilation of this kind has been verified. Even in the same language, one period may endure what another rejects; in the

older Latin the combination of *sm* was not avoided, but it was later, and *triresmus*, *osmen*, *casmēna* became *triremus*, *omen*, *camēna*. Sometimes a new phonetic law gains control and changes take place in conformity with it, as in German the vowel assimilation, called *umlaut*, did not exist yet in the Gothic, and very little of it in the earliest High-German.

We may then expect that a word passing from a parent language into its offshoots, as from Latin into French, or Spanish, or Italian, or Wallachian, will assume quite different forms, determined by the phonetic habits of the respective languages. So we see the Italian preserve the original *a*, where the French turns it into *e* or *ai*. (Comp. *padre*, *pane*, *tale* with *pere*, *pain*, *tel*.) The Latin *octo*, has in Wallachian become *optu*, in Italian *otto*, in Spanish *ocho*, in French *huit*. The Spaniards turn a Latin *f* frequently into *h*, as in *hablar*, from *fabulari*, *hierro* from *ferrum*, *hijo* from *filius*, *hoja* from *folium*. This is not done in French save in one word, viz.: *hors* from *foris*.

Observations of this kind have led to the recognition of rules and laws that control the structure of languages and the progressive changes of sounds. Many of the older derivations founded upon a superficial resemblance of sound, were discarded as impossible; whole "figures" were struck out. There is no phonetic principle to sanction the backward reading of a word called "anastrophe," for which quite a number of plausible examples had been adduced, such as *geis* and *zieg-e* in German; *tub*, and German *but-te*; *pot* and *top-f*. The pet theory of "interchangeable" letters was shown to be faulty, as, generally speaking, the change is in one direction only, and cannot be reversed; *s*, for instance, will turn into *r*, but not *r* into *s*; *d* into *l* (*μελετᾶν*, *meditari*, and *δάκρυ*, *lacrima*) not *l* into *d*; *a* into the weaker vowels, not *vice versa*.

In view of the fact that phonetic laws are constantly appealed to in questions of etymology and word formation, their origin, reach and claims to authority form subjects of unusual interest. How much is expected from a thorough insight into phonetic principles may be judged by a remark of Dr. George Curtius, one of the leading men in this department of investigation. Cautioning against the loose habits of etymologists* he says: "The astounding

*In another part of his work he refers to the recent attempt of a scholar to identify Greek *melas* with German *schwarz*.

transformations of older etymologists, which in their endless variety somewhat remind of the prestidigitators' tricks, should be replaced by a *natural law* that acts with a certain degree of necessity. If we succeed in this the caprice of etymology will be put under a wholesome restraint, and certain propositions be rejected as equally incredible as the suggestion that a duck had slipped out of a hen's egg, or that an apple had grown on a cherry tree." (Curtius: *Grundzüge der griechischen Etymologie*; p. 380.) If this seems to be strong language, we should remember that the most preposterous opinions as to the possibility of common descent of words have been set forth even in our times by men of literary ability. To take an extreme case, F. Kaulen, in his book on the "Confusion of Languages," says:

"What hinders us from assuming that the difference between the German *berg*, the Mandshoo *alin*, the Chinese *shan*, the Koptic *tau* and the Buriate *kada* is for us insurmountable only because we do not know the law of sound-permutation between those respective languages?" The comparison of phonetic laws with those of nature should, of course, be taken *cum grano salis*. Allowing all changes to have been effected by natural causes, these are so complex, so much analogous to national or personal habits, so indefinite in their operation, that they will supply hardly more than general maxims, such as, that all transitions must be gradual, or that easier and weaker sounds succeed harsher and stronger ones, and even these are not in every case upheld by experience.

Our knowledge of phonetic laws is virtually derived from comparison of facts, which the history of language supplies, and the value accorded to them must depend on the greater or less uniformity with which they are observed.

Of course the more circumscribed a law is, the better it works. A rule that holds good in one quarter may not hold good in another. We find that words like *hail*, *sail*, *rain*, *own*, etc., had originally a *g* (*hagel*, *segel*, *regen*, *eigen* are the corresponding German words). Now this loss is for the English quite normal; in Latin or Greek *g* was under the same circumstances, entirely safe. Here the phonetic law, to read correctly, has to state not only the language and the period of change (transition from Saxon to English) but also the place of the letter in the word. For initial *g* is as

little affected in English as it is in Latin (excepting a few isolated caes, as *enough*.) And so it is generally. The position of the letter, whether closing or medial or heading has to be considered in the rule. The weakest part of a word is its closing portion, then comes the middle; the steadiest is the beginning. *Lupus* in becoming *loup* not only loses its termination, but also *p*, as far as the ear is concerned. If *p* occurs in the middle of a Latin word, it is apt to be softened in French to *v* as in *savoir* from *sapere*, while it remains intact when leading, as in *père* from *pater*. But it would by no means do to extend the latter rule beyond the Romanic to the Germanic ground; for here an initial *p* of the ancient languages is regularly superseded by *f*. (Comp. *father* with *pater*, *few* with *pauci*, *fish* with *piscis*, *full* with *πολύς*.)

A set of particular laws thus deduced, if sufficiently parallel, may be combined into a more general law, but the higher we rise in the scale of generalization, the weaker the law becomes through partial failures.

Let us look for an illustration to Grimm's law which furnishes the best example to the foregoing remarks. While several of the nine distinct formulæ, upon which this famous law is reared, are without breach, the general formula, as given in a previous part of this article is merely an ideal statement, a sort of linguistic diagram, which must be much disfigured by provisos, limitations and individual exceptions before it will square with the real state of facts. It should, nevertheless, be borne in mind that these anomalies for the most part consist of classified cases and thus after all represent an element of regularity. They are as follows:

1. The letter *t*, when preceded by *s* or a guttural, suffers no change; e. g., Latin *stare*, Gothic *standan*, German *stehen*. Latin *noctis* English *night*, German *nacht*.

2. Gothic *tr* remains in German: *trauan*, *trauen*.

3. Gothic *h* remains in German: *hairto*, *herz*.

4. Gothic *f* remains unchanged: *fisks*, *fisch*.

5. Gothic *g* and *b* change into the required *k* and *p* only in those provinces where the dialect favors that substitution. Generally, they remain unchanged: comp. *giban*, *brikan*, with *geben*, *brechen*.

6. The formula *b*, *p*, *f*, is represented by one example only, viz.: *cannabis*, *hemp*, *hanf*.

7. The sounds of the second stage remain occasionally unchanged in the third; comp. Gothic *bairts*, with German *bitter*, English *bake*, *thick*, *luck*, *rat*, *fat*, *snap*, with German *backen*, *dick*, *glück*, *ratte*, *fett*, *schnappen*.

8. The uniformity of the rule suffers by the varying position assigned to the Persian, Celtic, Slavonic and Lithuanian languages, which stand partly on the first, partly on the second stage.

9. Miscellaneous irregularities. Gothic *dags* (*day*) retains the *d* of the first stage (*dies*); German *vater* and *mutter*, the *t* of the first stage (*pater*, *mater*). Words adopted from the Latin into the German, partly conform to the law, partly not. Examples of the first kind are *pflanze*, *pfalz*, from *planta*, *palatium*, of the latter *purpur*, *palme*. Again, *tafel* and *pforte*, from *tabula*, *porta* change their labials but leave the dentals *in statu quo*.

Finally, in order to form an impartial judgment of the nature and the bearings of Grimm's law, it should be remembered* that it assumes no more than to compare cognate tongues, and that the permutations which it records do not in every instance represent an actual progressive change. Gothic was not derived from Latin, nor Greek, nor Sanscrit, and High-German not directly from Gothic.

We do not know the exact sounds of the Indo-Germanic, whence the derived languages have sprung, or know them only by inference. But even taking Sanscrit as a starting point, the consonantal change in many instances will not appear so violent, as if we were to make the comparison with Latin or Greek. Our word "bear," Gothic *bairan*, is certainly cognate with *fero*, but not derived from it; the Sanscrit root *bhar* shows that the initial letter was *b*, followed by breath, and all the change this root has suffered from the time of the Vedas to the present day is the loss of this little breath. In German, too, the same word remains almost unchanged in *bahre*. Even the Latin was satisfied with *b* for *bh* in compounds ending with *brum*, *ber*, *bris*, suffixes derived from *bhar* (*candela brum*, i. e., candle-bearer.)

Grimm discovered the symmetry of consonantal changes, which his law displays, by the comparison of given facts without venturing upon a theory. Attempts have, however, not been wanting to supply the *rationale* for it; Curtius, Weinhold, Max Muller, and lately Scherer, have tried to solve the problem. The main

difficulty is this—to reconcile the facts which the rule systematizes, *i. e.*, the sequence of changes, with an order to be expected on phonetic principles.

This leads us to advert shortly to that scale of phonetic changes which is based upon the natural tendencies of articulation, and which somewhat partakes of *a priori* reasoning. The theory is known as that of phonetic decay, and the ground which it assumes is, that our speech, with due respect to necessary distinctness, inclines, on the one hand, to rapidity of utterance, on the other, to ease and relaxation.

I. RAPIDITY. As thought is swifter than the process of coining it into words, it will ever act on speech as an accelerating force. It is not necessary to assume that we speak absolutely faster than our ancestors*), but we get sooner through our words. Chaucer's line: "But God forbede but men shulde leve" to be read correctly, must have the three syllables which are now silent sounded.

This tendency to rapid utterance bears mainly on the final syllables, and on the more volatile parts of a word, *viz.*: the vowels, which are either thinned or altogether lost. The elimination of vowels often occasions an inconvenient jarring of the remaining consonants, and their collision may lead to further changes, *viz.*: the expulsion of some inconvenient element, or the mutual adaptation of the contiguous sounds (assimilation). It is this loss of vowels which has counteracted the polishing wear of time, as a rock made up of parts which have a different degree of solubility can never wash smooth. Hence, we get those harsh,

*NOTE.—This may nevertheless be. The whole metrical system of the ancients depends on actual time-measure, as much as our music does, and if long syllables were drawled out to double the length of short syllables, the reading of verses must have been in the *recitative* style. But the proper quantity of syllables was observed not less in common speech than in poetry. Another reason: Would it have been possible for a Roman short-hand reporter, with his steel pencil and wax tablet, to follow one of our glib speakers? The Romans themselves, we know, did not speak too fast for their "notarii," who took down every word quicker than it was spoken, if Martial tells the truth:

"Currant verba licet, manus est velocior illis,
Nondum lingua suum, dextra peregit ogus."

Ausonius, alluding to the same fact, also makes mention of the wax tablets (*aequor cereum*) upon which the feat was performed.

grating words, as *worlds*, from Anglo-Saxon *veoruldas*; *arst* (pronounced *artist*) from Greek *ἀρχιτεχνος*. Often enough this condensing process crushes out consonants, as well as vowels, e. g., *damsel* from *dominicella*, *count* from *computare*, *custom* from *consuetudinem*.

2. EASE. Sounds requiring less energy for their production displace those that require more. A scale arranged on this principle places *a* (so-called Italian *a*) at the head of vowels; the comparative weight of the other vowels has been extensively discussed, but the results cannot be stated without entering into great detail. Of the consonants, the *tenues* lead the *media* and the blowing sounds; *d* and *r* are stronger than *l*, *s* stronger than *h* and *r*; a closing *m* weakens into *n*. And in comparing letters of different organs, the palatals require more effort than the dentals these more than the labials.

With regard to some of the letters, it might seem as if their rank had been assigned to them in an arbitrary manner, or perhaps with a view to suit the facts, which the arrangement is to explain: but this is really not the case. The blowing and friction sounds, *th*, *f*, *s*, *z*, *ch*, *sh*, which are set down as weaker than *p*, *t*, *k* have more body of sound than the latter, but it is not the greater or less noise which a sound makes, that determines the amount of force expended in its formation. The closing of the articulating organs for producing the explosive letters, *p*, *b*, *t*, *d*, etc., is more of an effort than the partial opening, which allows the breath to escape and causes the friction sounds. That gutturals are really uttered with more difficulty than dentals or labials is very apparent, through the failure of children in their attempts to pronounce *k*, and the ready substitution of *t* in its stead (tom for come).

While the permutation of letters called for by Grimm's law is obligatory on the languages which are concerned, this law of phonetic decay, of course, merely indicates in what direction the changes, if any do occur, should be expected. The question now is, how well the facts agree with the theory. Save one serious break, soon to be noticed, the deviations from the rule are not many, and these are mainly found in the Romanic languages. So the French has substituted *a* for a weaker vowel in *par* (*per*), *langue* (*lingua*), *sans* (*sine*), *chaque* (*quisque*), but the rule is supported by an overwhelming number of examples. Also the rela-

tion of *r* to *l*, which is so rigidly maintained in the ancient languages, that not a single case of *l* turned into *r* can be adduced, is occasionally reversed in the languages derived from Latin. Compare *rossignol* (*lusciniæ*), *orme* (*ulma*), *épître* (*epistola*).

But a very remarkable exception, and one which would seem to shake the whole theory of phonetic decay, is the appearance of the *tenues* or stronger letters in the Gothic, English, etc., and again in the German, in place of the weaker *mediæ*. While *p*, *t*, *k* (*c*) in Spanish, Italian, French, etc., quite in accordance with the dictates of the rule, are frequently found softened down to *b* (*v*), *d*, *g* (*ch*), or have entirely faded away (comp. *salutare*, *saludar*, *saluer*; *super*, *sobre*, *sur*; *amicus*, *amigo*, *ami*), and while the *mediæ* have either remained unchanged or are lost (*credere*, *croire*), in the Gothic and German the conversion is, as we saw in noticing Grimm's law, the very opposite. Most unequivocally this is the case with the dentals, *t* becoming the substitute for *d*. Using instead of Gothic words the corresponding English ones, which preserve the Gothic or Low-German type, we see this by comparing *duo* and *two*, *decem* and *ten*, *domare* and *tame*, *dens* and *tooth*, *edo* and *eat*, *ŭdwar* and *water*. The same step is taken in going from the Gothic (English) stage to the High-German. Comp. *daughter* and *tochter*, *deep* and *tief*, *ride* and *reiten*, etc. It is not intended to rehearse any of the numerous attempts to account for this apparently retrograde movement in the transformation of sounds. Whatever agency we may make responsible for it, we cannot escape the conclusion that the influences which gradually transform words are not entirely like physical forces that act with blind necessity, uniformly and irresistibly. The life and the history of words share in that element of human spontaneity, which marks all other manifestations of mind and eludes the despotism of calculable forces.

When two words of cognate languages tolerably agree in meaning and general resemblance, but cannot prove their identity by the test of phonetic laws, we find ourselves on debatable ground. The English *call* and Greek *καλέω*, are so much identical in sound and meaning as two words can possibly be, but this very sameness creates the difficulty; *k* should have been represented by *h*. Going a step further back, it is discovered that Sanscrit *gar* will phonetically agree with *call* and also with Greek *γῆρυς*, speech, while

καλέω, is to be left entirely to itself. Now as we are totally in the dark about the time, circumstances and historical causes, which sundered the Greek and the Germanic languages from the parent stock and gave them a life of their own, it seems an overstraining of phonetic laws to allow *gar* to connect with *call* and Norse *kalla*, and not with *καλέω*. The history of the English furnishes a multitude of examples, showing that the same Saxon or Latin word may, through different channels, under various forms, find its way into our present vocabulary. Comp. *wile*, *guile*, *warrant*, *guarantee*, *warden*, *guardian*, *cattle*, *chatte*, *take*, *attach*, *ticket*, *etiquette*, *trill*, *thrill*, *cavalry*, *chivalry*, etc. Knowing the causes of this duplicate representation and the history of the respective words, we do not call their identity into doubt. That similar agencies were at work during the long period which moulded the ancient languages, giving to the same sound different representatives in the derived languages, cannot well be doubted. Latin *duo*, *viginti* and *bis* trace their initial letters to the same origin, viz.: *dva*; *ruber*, *rufus* and *ῥυθρος*, come from the same root.

Let us take another example. Greek *θεός* and Latin *deus* appear to agree as completely as English *thick* and German *dick*, but their relationship has been impugned on the ground, that Sanscrit *div*, *deva*, which corresponds with Latin *deus*, *dies*, etc., is represented in Greek by *θεός*, and that an original *d* can not be replaced in Greek by *th*. Greek *θυγάτηρ*, and *θύρα*, corresponding to Sanscrit *duhita* and *dhvara* would seem to be parallel cases, but this is denied, inasmuch as these Sanscrit words, it is averred, do not disclose the oldest form, which is surmised to have been *dhuhita* and *dhvara*. But however this may be—and it is at best merely a supposition—the irregularity that forms the obstacle is hardly sufficient to deprive *θεός* of its affiliation with *div* and *deus*, especially as the other derivations that have been proposed are not very satisfactory.

The method of etymological inquiry has been singularly improved by the recognition of phonetic laws and the close observation of habits peculiar to every language. But, while these laws are important witnesses and safe guides, they do not reveal the whole life of a language, do not solve all its riddles. The etymologist has sometimes to form his decision on circumstantial evidence, which may overrule a phonetic law. In the Gothic

haubith corresponding to *caput*, *b* should, according to the "law," have been an *f*, as it is in the Anglo-Saxon *heafad*, but never will its identity with the Latin and Saxon on that account be questioned. Thus the abbreviation of Latin *potui* from *potefui*, *potfui* cannot be based on any phonetic rules, but must nevertheless be accepted. In English and other modern languages the inclination to shorten long words has not rarely succeeded in this without the consent of phonetic rules. The process which reduced *cathedra* to *chair*, *amygdala* to *almond*, *presbyter* to *priest*, *cydonium* to *quince* is certainly a violent one, and reminds us of the cruel slashing which the scholar quoted in the beginning of this article so pitifully denounced. There are other nondescript changes that words sometimes suffer which it would be difficult to connect with any phonetic laws. Why or how was *rhododendron* ever turned to *oleander*?* But here we are, perhaps, outside the pale of law and propriety. These are corruptions, we are told; nevertheless they are words. We have to acknowledge that fancy, erroneous analogy, sometimes downright ignorance have frequently given to old words new faces and resemblances not to be accounted for on ordinary phonetic principles.

OSWALD SEIDENSTICKER.

NOTES IN CLASS.

SYSTEM OF DESCARTES—THIRD PAPER.

ON this theory of Descartes may be remarked, that it is not true that he says without reservation that the pineal gland is the seat of the soul. When he expresses carefully his meaning he says: "This gland is the part of the brain in and by which the soul immediately exercises its functions." He indeed says—"The soul has its *principal* seat in the gland;"—but this word *principal* implies, as he has also clearly expressed it, that this is not to the exclusion of the other parts of the organism, and especially not to the exclusion of the brain—and is to be interpreted by the clearer expressions. He says: "From hence the soul

* See Diez: *Etymol. Wörterbuch der Roman. Spr.*, I, p. 294.

sends forth rays (emittit radios);" which implies that the soul has the power of acting out along the line of nerves, as well as a being acted on by the external world through them. It is one of those hints of a great thing, which are so common in Descartes, but which require ages to ripen them.

The soul is immediately related, functionally, to the pineal gland, and immediately related by that gland through its dependencies to the body as an organic unit.

Secondly: The dual character of brain operation is now generally recognized; the two lobes are in a normal state so perfectly concurrent that there is a unity of impression and result. But in abnormal conditions one lobe acts either without the other, or not absolutely simultaneously. Out of this latter fact arises the phenomenon of seeming repetition of what has occurred but once, the reference to the past of what is occurring in the present.

Thirdly: The removal of the pineal gland has not always been followed by a loss of consciousness.

We now come to the third class of topics embraced in Descartes' system:

Psychological: 1st. The soul has an independent subsistence, and its actions or faculties are those of perception, cognition, thought and will.

2d. To think, actively taken, involves will; passively taken, it involves representation, or as we would now phrase it, perception.

3d. Representation or perception rests partly in the soul, partly in the body; the mutual relations of these in Descartes' system we have seen in the discussion of his views of the connection of soul and body.

4th. The ideas of the soul are three-fold—either (1) Adventitious—those which make their advent from external objects into the soul; (2) Factitious—those which the soul composes, or makes out of the adventitious; (3.) the Innate or Inborn—whose clearness and evidence is the criterion of truth. Descartes, explanation of this division of ideas is presented very briefly and lucidly in his Epistles (II 54.), where he says: "By the word Idea I understand whatever is capable of being turned in our thought, and I distinguish three kind of ideas: Some are adventitious; such is the idea which is commonly held in regard to

the sun. Other ideas are made or factitious ; to the number of these may be referred the idea which astronomers commonly form concerning the sun, by their reasoning. Finally others are innate ; such as the idea of God, of mind, of body, of a triangle, and in general all ideas which represent certain true essences which are immutable and eternal." It is to Descartes we owe the term *Innate ideas* ; he also calls them "*natural ideas*," though he employs it in a very different sense from that in which it has been used by some writers in later times. The great struggle between empiricism and rationalism in fact turns upon the question, Whether there are innate ideas.

By innate ideas Descartes meant something existing in the mind, antecedently to all experience, not the result of inference from observation. These innate ideas have only a potential existence, until the development of mind calls them forth into actual consciousness. Our senses are their occasions only, not their cause. Descartes says: "I have never written or judged that the mind possesses innate ideas which are something diverse from its faculty of thinking. I have called those ideas innate in the same sense in which we say generosity is innate in certain families." (Epis. i, 30.) "When I remarked there were in me certain thoughts which did not proceed from external objects nor from the determination of my will, but from the faculty of thinking alone which is in me, I did it to distinguish the notions or ideas which are the forms of these thoughts, from others which are adventitious or factitious."

One of the most distinguished commentators on Descartes, De la Faye, says: "On the question whether the ideas of the mind are connate or acquired, I reply, they are both. They are born with it, not only because it has never received them from the senses, but also because it is created with the faculty of thinking and forming them, which is the proximate and principal cause of them. On the other hand, they are acquired and not natural, if by this we understand that they are in the substance of the soul as in a conservatory or picture gallery that we may consider them as we please. They are contained in mind only in power, not in act."

It will be seen from this presentation of the doctrine of innate ideas that it is not open to the objection often made against it.

In fact, empiricism itself is compelled to concede innate conditions of the mind. Grant its figure that "the mind is a sheet of paper," yet paper is *fit* to write on and is meant for this. But the doctrine of innate ideas holds not only that there is a natural condition of receptivity in mind, but that in its texture there is that which causes a wholly different result from that of a mere influence of the external world upon it,—from that which would ensue if it were simply receptive and bound to what was necessarily involved in its receptive acts. *This* paper can transform into order and beauty the strokes made upon it, which without it seem unmeaning and chaotic. To the mind, external nature at most gives but the primary materials. Everything else in the matchless pictures is wrought by the mind itself. To say that *nothing* is in the understanding which was not previously in the sense, is more extravagant than to say that *nothing* is in the statue by Canova that was not before in the stone; *nothing* in the Transfiguration by Raphael which was not before in the paints, the brushes, the ground on which the colors are laid. *More* extravagant, for it is true that *all the material* of the statue was in the stone, and *all the material* of the picture in the paints, but the mind adds to the *material* of the world of sense. It is Canova who makes the stone a statue; it is Raphael who converts the colors into a painting; it is the mind which re-creates and transfigures the stone-impressions into materials of thought, feeling and will. But while Canova and Raphael are the *transient* causes of statue and painting, the mind is the *imminent* cause of the idea. The painting of Raphael does not fade out with the death of the artist; but the idea lives in the mind and by it, and if the mind could die, the idea would vanish with it.

An illustration of the condition of the mind on the theory of innate ideas, has sometimes been drawn from the art of the dyer. Some things are dyed by mere dipping in colors, they are simply receptive. Others are prepared, and the result is a hue and condition which could not have resulted from the dye had they been in their original simple state. The best illustration is perhaps from photography. The mind is not blank paper, but the prepared paper on which under certain conditions comes forth the miracle of science.

Finally, Descartes asserted explicitly the separate conscious-

ness and immortality of the soul. In summing up this philosophy, a French writer puts it in the form of a confession of his own faith. He says, with Descartes: "We accept evidence as the ground of our conviction of truth. With him we accept the consciousness which immediately attests both the existence of our own thinking and that of a soul, simple and immortal, thoroughly distinct from the body and its organs. With him we find within us the idea of the Infinite which involves implicitly the existence of the Infinite being. With him we receive innate ideas and, with Malebranche, a sovereign reason, the word of God Himself, which illumines all intelligences, reveals the Absolute and the Infinite, and is the source of innate ideas."

The same writer says: "Descartes, in our day is again, as in the 17th century, father of philosophy. Cartesianism has not perished, but is transformed and renewed. It revives in the chairs of universities, in public teaching, in all our philosophic doctrines. All the progress of modern philosophy has depended on the cultivation and development of the fertile seeds deposited by this thinker in its bosom."

The survey we have taken of the principles of the Cartesian philosophy has prepared us for the most vital question in regard to it: What is the proportion of truth and error in it? The warmest admirers of Descartes admit that his system has very serious defects, even while they maintain that there is a large preponderance of truth in it. One of its most serious faults is its exaggeration of an idea incontestably true, the idea of the dependence of the creature on the Creator; the truth that, as all created being has the reason of its origin in the Creator, so has it the reason of its continuance in Him. God is the preserver as well as the creator of the world. This point Descartes seems to have exaggerated to the point which might lead to a denial of all proper causality, and of all real substantiality in the creature, and thus have laid the foundation of Spinoza's Pantheistic Monism. Descartes seems to have separated the idea of force from that of created substance, as if God were the only force, and the creature simply passive and receptive; and hence the necessary concursus of the Creator with the creature was transformed by him almost into a continuous creation. Creation thus became a process, resulting in the running out of an Eternal

becoming. Having ignored the essential activity of the creature, this system of necessity tended to ignore entirely the fact of voluntary and free activity, and to confound the will with the judgment; and this exaggeration placed Descartes, who was one of the profoundest theists, on the path towards pantheism and of occasional causes, which is indeed not in itself pantheistic, but harmonizes with it very easily.

Another grave error into which Descartes falls, is in his mode of defining the liberty of God, which he makes a liberty of indifference; that is, one which chooses between things in themselves indifferent, and consequently involving something purely arbitrary in the divine choice. This error arose from the false construction of inferences from what Descartes believed to be an innate idea. It seemed to him that the necessity of God's willing thus or so in any case was inconsistent with the innate idea of the absolute freedom and sovereignty of God. To say that in any case God could not will otherwise, seemed to Descartes to overthrow the absolute perfection of God, and to establish a law mightier than the law-giver. This was in effect to deny the intrinsic nature of morals and of reason, and to overlook the very thing which Descartes wished to guard, that is, the perfection of the divine nature. The nature of God gives the law of His liberty. This liberty is not the law of His nature. There is a nature of God and a nature of things; a nature of reason and a nature of morals; and the liberty of God is not one of indifference, but one which involves the necessary difference and distinction between right and wrong, between reason and unreason. The error in this direction, though no less serious than the extreme in the other, did not exercise an equally pernicious influence with it. It was rejected by a majority of the Cartesian philosophers, who, following in the steps of Malebranche, acknowledge that the idea of the liberty of God is inseparable from the idea of supreme wisdom and goodness; and that the ideals of reason and of morals are immutable and necessary. Over against its serious errors, the philosophy of Descartes has given to the world great and fruitful truths, out of which modern philosophy has developed most important results in every direction. The merits of his methods are incontestible. He established the authority of reason in its own sphere, and on the wit-

ness of consciousness he constructed a barrier sufficiently strong to resist the efforts of skepticism and of a narrow false theology. He has fixed a starting-point for philosophy in the return of thought upon itself. He has marked the profound distinction between what pertains to soul and what pertains to body, and between the method proper in the study of thought itself and that which is proper in the study of its organs. He has so established this, that all deep thinking has since acknowledged it; the thought that the soul knows itself better than it knows the body, that the intelligible world has more evidence for its reality than the world of sense has, that it is more certain that mind is than that matter is.

But not alone in method, but in results Descartes has great merit. Establishing in intelligence the existence of ideas which are neither derived from the senses nor from our own independent intellectual activity, he overthrew triumphantly all the arguments which Hobbes and Gassendi and the sensualists of his time urged against the existence of such ideas. He has shed special light on the idea of the infinite, has fixed upon it an argument for the existence of God. Malebranche simply developed what Descartes implied, and showed that in this idea of the infinite our intelligence comes into perpetual communion with Deity.

Though Descartes exaggerated the idea of the divine concursus until he confounded it with creation, he did great service in fixing the consciousness of its necessity. All the later thinking of the highest order has been pervaded so far by the spirit of Cartesianism, from Spinoza to the latest of the pantheists, and even in materialism there has been a recognition of the great truth, that between the ultimate cause and the thing caused there is an unbroken relation. Pantheism still lifts its head, but deism may be said to have been philosophically annihilated by Descartes.

The errors of Descartes' system have passed away. The error of the liberty of indifference has been corrected by Malebranche. The error of absolute passivity was corrected by Leibnitz in his development of the idea of force. The truths of Descartes abide—they are fixed in the heart of modern philosophy, and it lives by them.

The best editions of Descartes' works are those of Cousin, 11 vols., octavo, 1824-26; Garnier's, 1835; Carpentier's (Simon) 1857; Aime Martin, 1854.

THE CINCINNATI CONVENTION marks the under-drift of all American political warfare to form on opposite sides of one great historical line—centralizers on the one side and localizers on the other. The adoption of the Constitution was a victory for the party of centralization; the others acquiesced with sullen dignity, finding themselves unable to successfully defend the loose and disorderly Articles of Confederation. They embodied their protest in the Resolutions of 1789, which have ever since been the watchword of the localizers. In 1801 they won their first great victory inside the Constitution, and through the absurd folly of their opponents, won it so completely that all organized opposition was annihilated. For a time the whole country was on the same side. The quarrel of Jackson and Clay developed an antagonism inside the dominant party, which corresponded in a weaker degree to the old one between Federalists and Republicans; the Whigs became a sort of semi-Federalists. With brief interruptions (1840-4, 1852-6) they held the national government in their hands. Not till 1860 was there a real reaction against them, which has ruled for twelve years. The Republican party came into power as a party of centralization in regard to the chief question of the day; they asserted the right of the central government to keep slavery out of the Territories. The necessities of the civil war developed the tendency in yet other directions, until the principle has become a party tradition of the strongest kind, and any allusion to States' Rights is scouted as an obsolete folly. The movement at Cincinnati, if successful, would reconstruct the Democratic party on the basis of its leading historical idea, accepting the tangible results of the war as *faits accomplis*, and as data for the new problem of politics. If the nominal Democrats refuse to unite with the nominal Republicans on this basis, it must be on the ground that the results of the recent war have been embodied in such a form (the Constitutional amendments) as fundamentally subverts the historical idea of the government, putting the States into a false position of undue subordination and dependence. "That's the question" between the two wings of the proposed new party, for we take it that Mr. Greeley and his friends are in no way disposed to co-operate with his new allies in repealing the new amendments.

Can a protectionist with honesty and consistency stand upon that platform? Hitherto the drift of opinion has been that who-

ever opposes or favors protection must logically oppose or favor centralization also. Mr. Greeley, as a disciple of Mr. Carey, might argue that "the truth of the matter is just the reverse. The natural effect of a free trade policy is to reduce the entire country to the same same occupation and a single type of character. Once accomplish that result, and the chiefest reason for existence of our cumbrous and expensive machinery of local government would become a superfluous relic of a past state of circumstances. The nation after centralizing its wealth and business at a few great points, would find the best political embodiment of its national life in a single strong central power, omnipotent in legislation and the execution of law. Protection, on the other hand, develops local centres of business and a financial system which is the exact parallel of our political system, securing the unity and strength of the whole nation by the full and free development of each of its parts. In a word, the true protectionist, while believing in a strong national unity, also believes that the surest means to it are indirect means; that the longest way round is the shortest way home. He believes that the fullest development of local individuality is the surest way to abiding unity in any high and fully developed organism. Spain tried the direct means to national unity; set herself to crush our individuality and free life in the parts—to the utter ruin of the whole. Germany took the opposite course, cherished freedom of thought and personal individuality, and the life of the people rose to a height that overflowed local barriers and made the people one." We have endeavored to state briefly and simply the historical aspect of this new movement in politics.

THE ratification of the Alabama Treaty is brought again among the possibilities of politics by measures which no one could have foreseen, and which reflect no especial credit upon the American negotiators. We fear that the chief end of all these negotiations has been utterly defeated by these entanglements. America will come back from Geneva—whatever be the decision upon the direct claims—no more kindly disposed toward England than she went thither. The hostility to the mother country, which, it must be confessed, is the single idea of foreign policy upon which all classes of Amer-

icans are agreed, will remain undiminished. Perhaps England's influence upon European politics, long cramped by the repute of American hostility, will be in some measure restored, and Russia will not be able to privately use Uncle Sam's name as that of a secret ally in her future plans for asserting a predominant influence in Europe. But at home things will be worse than before; the average American will carry with him an impression that England first befooled and then bullied his representatives into giving way where they should have stood firm, and will feel none the better for it. If, as is very possible, the decision at Geneva should be adverse even to our direct claims, the case will be still worse, and may result in deciding the fate of arbitration, so far as the United States is concerned. The next Alabama case will then be settled by diplomatic bullying, or (that failing) by war.

The Washington Government have even failed to secure any recognition of the principles of international law, which it is traditional for American statesmen to urge for adoption. England might easily have been induced to promise her influence to secure the adoption of the rule exempting private property, not contraband of war, from seizure on sea, which would have been a net gain to all parties, and a feather in Gen. Grant's cap.

THE Home Rule movement in Ireland, is somewhat of a revival of O'Connell's demand for Repeal of the Union, but is in the hands of a very different class of men. Its chief representative, Isaac Butt, M. P., occupies a very high place at the Irish Bar, and has a very large following among the Saxon Protestants of the kingdom. His plan is to secure the sitting of a subordinate Parliament in Dublin, with power to legislate upon purely Irish questions, while the Imperial Parliament containing its present Irish representatives shall remain the sovereign legislature. This raises several questions at once: What are the Irish members of the Imperial Parliament to do when purely *English* questions are under discussion? Who is to guarantee that the different Irish parties will not play the role of the Kilkenny cats in the National Parliament?—a state of things once only averted by the Union, and now more likely than ever since the extension of the suffrage

and the abolition of the established Church. If the new Parliament is to be managed by a responsible cabinet, how is its agreement in plans and politics with the English cabinet to be secured? The cabinet system, as Germany will speedily find, is not adapted to a system of subordinate legislatures.

At any rate, if the choice is between the Home Rule men and the Fenians, all sane people will prefer the former. Irish independence is an absurd dream; the country contains none of the elements of independence, and is distracted by party divisions so bitter and irreconcilable, that peace is only possible through union with England in some shape.

NEW BOOKS.

SHAKESPEARE IN LATIN.—Shakespeare's *Julius Cæsar* has lately been translated into the vernacular of the famous Roman by a Dr. Hilgers, of Hagenau. It is questionable whether the great English dramatist would in this garb have commanded the attention of the Romans, who laughed so heartily at Labæo's attempt to Latinize Homer. However, for the edification of the curious reader, we present a few specimens:

Antonius: Lacrimæ si quæ sunt monstrate in præsentia!

Novistis omnes istud pallium; scio

Quo primum Cæsar hoc se induerit tempore.

Aestatis vespera in tentorio suo

Quo Nerviorum copias vicit die!

En! hunc percussit Cassii mucro locum.

Heu, quam scissuram Casca fecit invidus!

Hunc perforavit Brutus dilectissimus!

Et quum mucronem extraheret ille ex vulnere

Vide quam sit secutus sanguis Cæsaris

Foras prorumpeus tanquam uti cognosceret

Num Brutus adeo verberaverit impie,

Qui Cæsaris fuit, ut novistis, angelus.

Di judicent, quam carus fuerit Cæsari.

Hic omnium fuit ictus impiissimus.

Illum cædentem nam cum Cæsar cerneret,

Ingratitudo, fortius armis subdolis

Confecit illum; rumpitur inde animus potens

Et faciem involvens pallio suam suo

In ipso statuæ Pompeii fundamine

Cruoris pleno magnus Cæsar concidit.

Heu, quantus casus, omi cives is fuit!
Attonius: Socii, Romani, cives, aures mihi date!
Venio sepultum, non laudatum Cæsarem!
Mali quod quisque fecerit, post hunc manet:
Bonum persaepe humatur ossibus simul.

THE HOOSIER SCHOOLMASTER; a novel, by Edward Eggleston. New York: Orange Judd & Co.; pp. 226.

The great defect in American and, indeed, in almost all novels written in English, is the want of localization; the fact of certain descriptions of scenery and locality being left out, the characters and incidents would seem as natural in one district of the country as another. This want is not felt in the novels in other languages, for in them the peculiarities of dialect and custom are not only noted, but carried through the book. Except a few tales in reference to New England and those wretched hybrids of Indian stories, the Dime novels and others of that class, we know of hardly any which make even a pretense at localization. But in the book whose name heads this notice, we have a perfectly successful effort to exemplify the peculiar phase of civilization developed some twenty years ago in Indiana, which at that time was about as far advanced as the less settled parts of Kansas and Colorado are now.

One of the characteristics of this development is thus described: "There had to be a spelling-school, not only for the sake of my story, which would not have been worth the telling if the spelling-school had not taken place, but because Flat Creek district had to have a spelling-school. It is the only public literary exercise known in Hoopole county. It takes the place of lyceum lecture and debating club. Sis Means, or, as she wished now to be called, Mirandy Means, expressed herself most positively in favor of it. She said that she 'lowed the folks in that district couldn't in no wise do without it. But it was rather to its social than to its intellectual benefits that she referred. For all the spelling-schools ever seen could not enable her to stand anywhere but at the foot of the class. There is one branch diligently taught in a backwoods school. The public mind seems impressed with the difficulties of English orthography, and there is a solemn conviction that the chief end of man is to learn to spell. "'Know Webster's Elementary'" came down from heaven,' would be the backwoods version of the Greek proverb, but that, unfortunately for the Greeks, their fame has not reached so far. It often happens that the pupil does not know the meaning of a single word in the lesson. That is of no consequence. What do you want to know the meaning of a word for? Words were made to be spelled, and men were created that they might spell them. Hence the necessity for sending a pupil through the spelling-book five times before you allow him to begin to read, or, indeed, to do anything else. Hence the necessity for those long spelling-classes at the close of each forenoon and afternoon session of the school, to stand at the head of which is the cherished ambition of every scholar. Hence, too, the necessity for devoting the whole of the afternoon session of each Friday to a 'Spelling

Match.' In fact, spelling is the 'national game' in Hoopole county. Baseball and croquet matches are as unknown as Olympian chariot-races. Spelling and 'shucking' are the only public competitions."

Here are two passages in reference to the religious forms and feelings prevailing then, which, though not exclusively local, are very characteristic:

"You see," said Bud, "I wanted to git out of this low-lived, Flat Crick way of livin'. We're a hard set down here, Mr. Hartsook. And I'm gittin' to be one of the hardest of 'em. But I never could git no good out of Bosaw with his whisky and meanness. And I went to the Mount Tabor church oncet. I heard a man discussin' baptism, and regeneration, and so on. That didn't seem no cure for me. I went to a revival over at Clifty. Well, 'twan't no use. First night they was a man that spoke about Jesus Christ in such a way that I wanted to foller him everywhere. But I didn't feel fit. Next night I come back with my mind made up that I'd try Jesus Christ, and see ef he'd have me. But laws! they was a big man that night that preached hell. Not that I don't believe they's a hell. They's plenty not a thousand miles away as deserves it, and I don't know as I'm too good for it myself. But he pitched it at us, and stuck it in our faces in sech a way that I got mad. And I says, 'Well, ef God sends me to hell he can't make me holler 'nough no how.' You see my dander was up. And when my dander's up, I wouldn't gin up for the devil hisself. The preacher was so insultin' with his way of doin' it. He seemed to be kind of glad that we was to be damned, and he preached somethin' like some folks swears. It didn't sound a bit like the Christ the little man preached about the night afore. So what does me and a lot of fellers do but slip out and cut off the big preacher's stirrups, and hang them on to the rider of the fence and then set his hoss loose! And from that day, sometimes I did, and sometimes I didn't, want to be better. And to-day it seemed to me that you must know somethin' as would help me."

The Brother Sodom of the next extract was the same preacher who excited Bud's wrath by preaching hell at him so much.

"Peter Cartwright boasts that, on a certain occasion, he 'shook his brimstone wallet' over the people. Mr. Sodom could never preach without his brimstone wallet. There are those of a refinement so attenuated that they will not admit that fear can have any place in religion. But a religion without fear could never have evangelized or civilized the West, which at one time had to become a perdition as bad as any that Brother Sodom ever depicted. And against these on the one side, and the Brother Sodom on the other, I shall interrupt my story to put this chapter under shelter of that wise remark of the great Dr. Adam Clarke, who says: 'The fear of God is the beginning of wisdom; the terror of God confounds the soul;' and that other saying of his: 'With the *fear* of God the love of God is ever consistent; but when the *terror* of the Lord reigns, there can neither be *fear*, *faith* nor *love*; nay, nor *hope* either.' And yet I am not sure that even the Brother Sodom were made in vain." And as the story proceeds, you find that, so far as it is concerned, at least, they are not in vain; and, indeed, Mr. Eggleston is very right in thinking so, for an emotional religion is the only kind to affect for good the class of semi-civilized people (who possess nearly all the vices and scarcely any of the virtues of both barbarism and civilization) described by him.

THE
PENN MONTHLY.

JULY, 1872.

ON THE REPRESENTATION OF MINORITIES.

BY THE LATE THOMAS GILPIN.*

OWING to the difficulty of procuring impartial and useful legislation in the present mode of conducting the elections, it becomes worthy of consideration, whether there may not be a plan constituted for choosing representatives for the several legislative bodies differently from the present one, so as to have a more equal and just relation to the condition of society—to preserve more truly the rights of the people; to carry more strength and talent, and a more efficient expression of public opinion into deliberative assemblies.

The present mode of choosing representatives by *a majority of the votes of electors*, has been so obviously before the people, and it is so easy for the majority to continue it, that it has been used in popular governments, from their early origin, and has remained without any attempt at improvement or even consideration. It is true that it is based upon the just principle, of *the right of the majority to govern*; but in practical legislation it is connected with a very erroneous one, *that the voice of the majority alone is to be*

*Our attention having been called to this by a remark in the *Public Ledger* we obtained it for publication, thinking that the first paper written on the subject would be of interest to our readers.

EDS. P. M.

regarded. Thus in making an election of representatives as it is now done, in a district, by the majority, a large part of the people forming *barely the minority*, is deprived of any interest or voice in the elected councils, and there is no opportunity to bring into them any considerations, but those respected by the majority.

But if the deliberative assemblies were divested, as they ought to be, of the strong desire for political power and exclusive legislative action, there would be a better estimate of the advantage of a representation to correspond to the general feeling and opinion of the people.

Let us, therefore, examine the question, whether there can be a legislative assembly elected, so as to represent the respective interests of the community *in its deliberations*, and to allow the control of the majority *in its decisions*, to which it is entitled.

For the purpose of testing the proposition, it will be necessary to advert to the operation of the present system in its forming some of the representative assemblies, in the example of one or two particularly known to us; but these are not referred to from any motive of adverse observation.

The usual result of the elections in the city of Philadelphia, for its councils or corporation, gave for several years but a bare majority of the electoral votes to elect the whole representation, which was thus continued from year to year by one party, and the operations of the councils and city interest governed exclusively by it.

By the returns at the elections for several years previous to the last, a very uniform state of voting at the polls continued, say for the years 1840, 1841, 1842. In 1841, the number of votes polled was 10,304, and the votes were returned of but two parties, who gave respectively 5,545 votes and 4,759 votes, so that a change of 394 votes in that year from one party to the other, would have displaced the whole representation of twenty members of the corporation. And it is also obvious, that as the whole number was put in by *the majority*, there was no representation for the *minority*, which gave the votes of nearly one-half of the citizens. These have no voice in the councils, be their candidates ever so worthy and efficient, and their interests ever so important. And it would be illiberal to conclude that abstract political sentiment should

constitute a disqualification to attend to their own and the public concerns in a legislative assembly.

Independently of this it is very evident, that the influence derived from the possession of power and office tends to preserve it ; it is scarcely ever, if ever, voluntarily yielded to a just consideration of the equal rights of the community, in consulting the general good feeling requisite for constituting a legislative assembly. And it is evidence of an arbitrary, and not of a fair republican principle, for any party to retain the exclusive representation and responsibilities of the public weal ; because experience has abundantly shown that where this has been long continued, either in republics or monarchies, it involves them all in the same character, and is the virtual source of oppression and injury—the cause of great discontent—and even when not subversive of the administration, it is subversive of the harmony and confidence which ought to be afforded to it.

And it is *the right of every interest to be represented, as far as possible*. There are many advantages to be derived from the introduction of opposing ideas, if it is only to test the strength of correct or prevailing measures ; for it is certain that a delegation to represent the most important interests may be taken from all parties, so as to balance the public mind, draw forth its energies, and substitute rotative for arbitrary action, so much the result of assemblies holding long and exclusive legislation.

It is a matter of general acknowledgment, and even of record, that had the voice of the opposition, so frequently and respectfully offered but disregarded, in the administration of our late financial concerns received attention from the persons then in power, the catastrophe so universally spread over the country, would have been greatly lessened and probably averted ; and as we should not be confident that other institutions are now free from a similar effect of exclusive action, a cautious oversight should be given to regulate them.

There is another evil growing out of the present system of electing representatives in this manner, in opposition, without having respect to the minorities ; in many places a third party is coming forward, which though the minor one, and without independent power, is nevertheless important to both ; and being at hand to be solicited, can give its numbers and influence to either ; holding a

sway between them, it is able in return to commute for its own interests beyond their merit. A management of the kind among the parties now in the State of New York is producing this dilemma there, although for want of exact information, it cannot be further observed upon at present; but in the State of Massachusetts it is exhibited more exactly—it is there that a *third party*, now the advocate of abolition, holds the balance so as to vacillate between the two political parties. And in order to make this understood, the case may be stated as it exists, at least in its proportionate numbers, to show in what way this effect is produced.

The larger party in one district may have a proportionate vote, say of 10,000 electors, and yet be deficient in a majority; the opposing political party may vote 8,000, and the third party, *now for abolition*, 5,000, making together an aggregate of 23,000.

Now, it is evident that the measures of both the former may be under the management or even control of the third party. In this manner partial legislation and ultra measures have been obtained by the urgency of this smaller body of the three, which would not have been permitted in an independent organization of the electors and representatives.

The Legislature of Massachusetts has sought to remedy this evil by providing that a *plurality of votes* shall be regarded as that of a *majority*, but the event of this will be that the *plurality party*, though able to command a greater number of votes than either of the others, but less than both, will obtain the sway in the State, and subject both the other parties to it.

It will, therefore, be evident that this proposed expedient will not redress the evil, and how strangely will it operate! The plurality votes of 10,000 electors will enable it in legislation to have control over 13,000; because the plurality ticket, being united, will carry its majority over the divided tickets of the other voters, which of course is subversive of the principles of republican representation.

Has there not been good reason to believe that, in this way, interests of high importance to society have been frequently compromised during the contentions of the large political parties by alternate cessions to the various sub-interests in return for their votes and influence, to an extent detrimental to the future inter-

ests of society, and which neither party would conscientiously accede to if invested with free and independent legislation?

The question then offered is, Does the case admit of a practical system for equal representation?

The following one is presented for it. It is believed to be efficient and justly applicable to the present state of society. It is founded upon the principle of republican government and equal representation, and capable of bringing forward the latent good sense of the people, now much withdrawn from public service owing to the overrule of political contention and party management, and that it will cause the elected body to be an exact representation of the public interests.

Let the number of representatives allotted to each district of a State be divided into the number of electors, so that *a quota may be established, to allow a certain number of votes to choose a representative.*

The number of votes thus assigned, taken for all the delegates together, will of course be the number of votes found in the district; for the quota for the election of each delegate may actually be determined upon, when the votes are all handed in, at the close of the election.

As every quota of votes may be united in by any interest, and will entitle it to a representative, so one or more quotas united, according to the number of voters, may choose one or more representatives for an interest independently of the others.

Should even *general politics* continue to be a *paramount consideration*, as it has so long prevailed to be, and the number of voters be so large as to command a sufficient number of quotas, a *majority* in the elected body may continue to act even for *political purposes*; but other quotas will be obtained by the minority to have an opportunity to represent their political or other views, and different interests thus represented may advocate independently any important measures which require it.

In this way, the selection of candidates may be made up without excitement, and certainly without competition; because they may be sent very much from separate parties, having a union of interests, so that each may promote its own candidate; of course the equivalent considerations for introducing partisans into general tickets will be at an end, and with them all the small legisla-

tion of closet and club-meeting politicians, to make their nominations of representatives, bound to a general understanding to uphold party interests, and not at liberty to advocate measures independently beyond them.

This plan would be eminently conservative of general representation ; it would produce steadiness of legislative action ; would prevent the sudden dismissal of *all the representatives of a party from power at any one time* by the contrivance of officious politicians, who are able easily to turn the scale by misrepresentation, where the parties are nearly equal, and even when this occurs by a sudden change of the public mind ; the change cannot act disadvantageously on legislation, because there will always remain a sufficient number of the electors unchanged, to return many of the most suitable delegates of the previous party to be mingled with those newly elected.

This plan will prevent very much those hasty and unjust displacements from office, which have taken place, by granting to the successful party "all the benefits of office," so offensive to the sentiments and feelings of a large and independent part of the community, desirous only of a steady, just and impartial administration of government.

By this means the Legislature would be filled by delegates for special objects, and renew its republican features by qualifications to take charge of the respective interests of the community, with a better consciousness of service and responsibility than that of being sent as *simple delegates or representatives* of a political party for the term of one year, more qualified to practice in *the art* than in *the science* of public economy and legislation. Would not such an appropriation of suitable persons vastly improve our public assemblies ? Would it not introduce individual responsibility, both into the several assemblages for the appointment of candidates, and by the selection of men adapted to their appointments ? Would it not induce respectable assemblages of persons now adverse to common political meetings, but who would be willing to attend when the *special interests of the country required it for business purposes, and for objects* which demanded legislative aid and representation ? Would it not in a measure *recognize the attention of the community*, break up the caucuses of political societies, to which the better part of the people are victims, and the vic-

tims of the aspirants to office, who offer to them no choice but of party candidates elected to sustain themselves? Might not the great interests of the country first be brought forward and understood, and then persons selected to attend to them in their several departments, and these varied on occasions where particular objects required it.

Let us now review the course of some of the last elections for the city of Philadelphia in relation to the adaptation of this system, and it will be found that, had the plan been then carried into effect, it would not have destroyed *the majority* of the present party, although, it is true, it would not have so far gratified it *as to allow it all the delegations*; yet the councils would have been more just, and of course more safe in all their operations, if they had been guided by such a courtesy as to have united other interests with their own in conducting the public business. For thus the councils represented little more than a *divided authority*, dependent upon an *uncertain majority*, chiefly supported, if not contrived, out of previous patronage and incumbency of office.

The votes given at the city election of 1841 were..... 10,304

And twenty representatives were elected.

If, then, 500 votes would be the assigned quota as the due proportion for a representative, the aggregate would be

for the twenty..... 10,000

Dispensing with the residuary fraction of..... 304

The majority to elect gave 5,545 votes, which, at 500 votes per delegate, gave 11 rep.

The minority which failed to elect gave 4,759 votes, which would have elected..... 9 rep.

Making the whole number of..... 20 "

and this would have left in favor of the ruling party a majority of two representatives, which is as great as the general electoral vote would have given on the former mode, or could be claimed for it on any public appeal.

As an act of justice, such an arrangement is required to satisfy the public mind, and it would amalgamate the better feelings of the community. Should any excitement be produced by disquietude of the people, by accidental circumstances, or by retaliation, and a consequent change of city councils ensue, so that the

opposite party alone gets into power, the event will not be less to be deprecated than by having the present or any other *partial or exclusive* administration. It is always unwise to afford exclusive power to any one party, particularly as it regards its own character and responsibility; the party out of power is accustomed to take advantage of every failure of the measures of those in power, and many operations are often in progress, the propriety of which, at least in public judgment, is decided by success, be their nature and risk what they may; but even this judgment may not be altogether so unreasonable when legislation is one of assured and exclusive responsibility, because the acts of any public body are much better deliberated upon, and more judiciously determined, when there is not the uniform disposition to urge business forward by the sanguine view often taken by persons accustomed to act together.

The following view may be taken of the result of this plan for permitting the *minorities to act with the majority* in the public body, by showing its application to the last return of votes for corporators in the City Councils; and the rules are given by which this plan may be adopted to govern similar elections.

After the tickets have been agreed upon on the part of the electors as usual, and include the whole number of representatives to be voted for, they are to be handed in by them at the several wards to the judges and inspectors. But the votes are to be assigned differently from the usual mode, and the choice of representatives will be made from them as follows:

First. A number of votes to form a *representative quota* for the *choice of one member* will have to be fixed upon; this might be done by referring, for a standard, to the number of the votes given in the district at the last previous election; but it may be better to wait for the close of the pending election, and then procure the number of votes polled at that time.

Second. This number is to be divided by that of the representatives allotted for the district, in order to fix upon the proportion of votes, as a *representative quota*, which each ticket must give to entitle it to choose a delegate.

Third. Each elector's ticket may contain, as candidates, the whole number of representatives to be voted for in the district; and these should be placed on the list according to preference, in or-

der that those first set on it may be chosen according as the number of votes given may entitle the ticket to one or more of its candidates.

Fourth. The representatives are to be chosen by any electing interest whose votes amount to one or more representative quota, and it is to have one or more representatives accordingly. Those who are highest in vote are to be first chosen ; and when the votes are equal then the preference is to be given to those who are highest named on its list of candidates.

Fifth. When the number of representatives is not made up by the votes in the representative quota, then the remainder is to be taken from the residuary numbers of unsatisfied votes, beginning with the highest number unsatisfied on each ticket, and then in succession, from which there is to be taken the candidate highest in vote on its ticket ; or if the votes are equal, then the highest on the list.

Sixth. If only one representative is to be chosen from a district the election is, *in this case only*, to be made as it is now done, *by the majority*.

In fixing primarily upon the representative quota, it is not desirable to arrive at any particular exactness in the division of the whole number of votes among the representatives ; at least not to descend to the fractional parts of hundreds, because less than these could not be entitled to a representative. And when the multiple or whole number is fixed upon, it places all the representative quotas on the equal footing necessary for all useful purposes, and they will all have the same claim upon the residuary votes.

Under the above rules we refer a general result of the election of 1841, which would have been as follows :

In this statement the whole election returns are given ; but the division of the minority vote is of course supposititious.

The votes of the majority were.....	5,545
“ “ “ “ minority “	4,759

———— 10,304

Thus, twenty representatives allotted, establishes a representative quota of 500 to each delegate.

Majority interests represented.		Votes Polled.	Delegates Elected assigned.	Residuary vote.
I. Political Party (Whigs)		5545	11	45
Interests which might be represented :				
II. Political party (Locofocos),	4759	1,859	3	359
III. Temperance interest		1,200	2	200
IV. Girard College,		600	1	100
V. Agriculture,		700	1	200
VI. Manufacturers, Commerce,		400	0	400
		10,304	18	

The quota representation thus voted does not yield the full numbers of delegates, and the two required are to be taken from the residuary numbers highest on the returned tickets, viz. :

	Votes polled.	Delegates elected assigned.
VI. Manufactures and Commerce.....	400	1
II. Political party (Locofocos).....	359	1
Making the full number.....		20

The representative is to be taken from the highest in vote or in place on the several tickets ; thus the party which does not obtain a member on its quota, and ascends highest in the residuary vote, obtains one when the quotas are supplied.

The reference in the foregoing statement has been made to the state of the election returns of three years before the last, because they were tolerably uniform, and the result of the middle year was taken. In the year 1843 the votes were materially changed, and suddenly gave a majority of 2,448 for the highest political party ; this majority may be either accidental or permanent, and it might have been produced on either side by some accidental or extra influence ; but in this view it is not intended to discuss the merit of any particular politics, but only to allude to the cases, in order to guard against partial representation, and the injurious effects of sudden vacillations upon public affairs.

If the change is one of those liable to be produced by an easy influence of the public mind, it ought to be guarded against by some change of system in taking the public votes ; and if it is more permanent, it is still equally proper to arrange a method by which both sides should have a due representation of their opinions and measures.

It will be proper, further to carry out this rule, in order to show its application to the election returns of the votes and representa-

tives of the city and county of Philadelphia in 1843, and the manner in which a quota representation would then have given a majority of the assembly members, and have represented the same political interest.

County votes of the majority.....	6,604
“ “ minority.....	3,890
Total.....	<u>10,494</u>

And as four representatives are allowed, the quota representation in this case to elect a representative will be 2,500, leaving the residuary portion 494.

	Votes polled.	Delegates.	Residuary.
I. Political party (Whig).....	6,604	2	1,604
II. Political party (Locofoco)....	3,890	1	1,390
	<u>10,494</u>		

But as the quota representation yields only three delegates, one is to be taken from the highest residuary vote, (Whig) 1,604..

	<u>1</u>
Making the full number	<u>4</u>

Which in this case returns:

Of the first political party (Whig).....	3
Of the second political party (Locofoco).....	1
	<u>4</u>

Large political parties do not seem to be expedient for conducting the useful business of a country, as their purposes become conventional, and their action becomes merged in the support of place or power, which should be prevented when there is sufficient identity of public interest independent of such considerations.

How little ought general or national politics to influence the internal police arrangements of a state or city, its improvements or its finances? Yet, is it not made a medium for general acceptance to every office, public services being a secondary consideration to subserviency in political measures?

The majority power has for a long time ruled all the interests

of the country, and has been exercised with arbitrary inconsiderateness alternately by each party. It can be corrected in no way so effectually as by throwing immediately before the public the objects which should claim its attention, in order to produce an immediate connection between the people and their interests, and this can only be effected by a representation independent of politics.

By this plan, however, the rise of a political party to a certain extent is not altogether impossible, and might be permitted if useful; but it being easy thus to introduce into the legislative bodies other interests by the minorities, they will keep it in check by the independence of their election, as they probably will by their intelligence.

Should even the native American party now coming forward be found worthy of public support, and get favor, so as to be useful for a time, its purity and efficiency will be much preserved by its not attaining to a predominant sway, or, at least, by only arriving at it relatively to other interests.

Reference has been made to the election returns of the city of Philadelphia, merely on account of its easy investigation, as it answers for an example of the deficiencies in representation; these, however, exist in the same manner in all elected bodies, and they will so remain and be unsatisfactory to the constituents, until the interests of the minorities become respected, so that they may be represented and act with the majorities; and it is believed the plan now offered, when it becomes understood, may be adopted to remedy the deficiency, and it is referred for that purpose to the discretion and intelligence of those who acknowledge the serious evils of party contentions arising out of the right of the elective franchise.

That the alteration, by this plan, in making election returns, would change the representations from various localities may be expected; but it is to be expected that it will be generally to great advantage, because it carries out a principle of exact representation and relief; and as delegates can be sent to represent every important interest, it must give evidence of its own propriety, and must eventually be acceptable.

The practice heretofore pursued of resting all predilections upon the title of a great political party, has subjected the district

divisions, as well as the political parties, to *very peculiar*, though they may be *appropriate, epithets*, many of them certainly not selected for their elegance, and which clearly indicate considerable restiveness on the part of the people.

The advocates of particular measures, or even of a favorite candidate, will have at all times an opportunity to unite for a quota representative, and by calling upon each elector to discriminate among the candidates, to place at the head of his ticket the best men, and thus bring forward an interest to be respected in the representative body; this will require deliberate reflection on the choice to be made among the various objects of moral or civil benefit, in order to give preference to those of the highest importance.

If this system be sound and practical, as it is believed to be, the further promotion of it is respectfully submitted. At no period of republican history was there required more attention to the renewal of representative principles, and the revival of representative purity.

THE ART HISTORY OF THE FAN.

I sing that graceful toy whose waving play
With gentle gales relieves the sultry day.

The Fan.—JOHN GAY.

The fan is an instrument used by ladies to move the air and cool themselves.—DR. JOHNSON.

THE students and historians of art are learning a large and catholic measure of judgment as regards the range of their favorite topic. Once the art-student confined himself to the art-gallery; they paid attention to nothing but what was made simply to be looked at and admired, and especially nothing that did or possibly could be of use. We now begin to look at the coarse arts, as at least close relations of those that we call fine; the entire work and manufacture of a people are seen to be the art-embodiment of their life and thought, and therefore documents of their intellectual history. Especial attention is there-

fore paid to the border provinces of the two kingdoms, where beauty and use are united, and the artistic skill of the designer passes into the household and daily life. The possessor of a dish that took shape and coloring under the touch of Palissy is not inclined to look upon it as differing in the kind of its merit and interest from those of a picture by Cuyp, although it was made to be eaten from, and most probably was actually used for that purpose.

The fan, of varying forms and different materials, has been in use from the earliest times; it may be traced in the monumental and other records of the Chinese, Japanese, Indians, Persians, Greeks and Romans, as well as in the poetical allusions of Homer and other classical writers. It has always been employed in religious rites and services, and as the decorative emblem of sovereignty; and in all hot-sunned climates it is naturally fashionable with men as well as women, for its use as a shade to the face, to cool the heated features, or as a *chasse-mouche*.* During the earlier Middle Ages we find no trace of the fan in Europe—although it is most probable it was still an article in use. The first mention of it appears in the first part of the thirteenth century in the cathedral and abbey records, which refer to it as “an appendage for decorating the ceremonies of the church.” Later in this century fans made of feathers fixed in a richly carved and decorated handle, were worn by the Italian ladies, suspended from their girdles.

The Japanese invented at an early day the *folding fan*, and

*A French lady, who had the character of being one of the most *spirituelles* of the court of Louis XIV., wrote to her friend, Madame de Stael: “Supposons une femme délicieusement aimable, magnifiquement parée, pétrie de grâces; si avec tous ses avantages elle ne sait que bourgeoisement manier l'éventail, elle aura toujours à craindre de se voir l'objet du ridicule. Il y a tant de façons de se servir de ce précieux colifichet, qu'on distingue par un coup d'éventail la princesse de la comtesse, la marquise de la roturière. Et puis, quelles grâces ne donne pas l'éventail à une dame qui sait s'en servir à propos! Il serpente, il voltige, il se resserre, il se déploie, il se lève, il s'abaisse selon les circonstances. Oh! je veux bien gager en vérité, que dans tout l'attirail de la femme galante et la mieux parée, il n'y a point d'ornement dont elle puisse tirer autant de parti que de son éventail.”

Catalogue of the Loan Exhibition of Fans, 1870; South Kensington Museum, with an introduction by Mr. Samuel Redgrave.

they have always been famed for their skill and excellence in its manufacture. The Chinese adopted it and from China it was brought into Portugal during the fifteenth century, and in the next century appears to have been in general use in Portugal, Spain and Italy. From Spain, in the sixteenth century, it found its way into France "with the Italian perfumers in the suite of Catherine de Medicis, soon became fashionable at court, and was in great favor with the *mignonnes* of Henry III." In England, fans were a female ornament in the reign of Henry VIII., and are said to have been introduced in the preceding reign. Queen Elizabeth wore a fan as a part of her sumptuous attire, and it was an acceptable present from a courtier. There is a particular record of the presentation of one to her majesty on her birthday. In her portrait at Gorhambury, she holds in her hand a small folding fan, and the same may be traced in other contemporary portraits. Twenty-seven fans are enumerated in the inventory of her majesty's wardrobe, 1660.

From this time the fan appears to have been, throughout Europe, an essential part of a lady's dress; but its chief manufacture following the Chinese model, as located in France, and in the reign of Louis XIV., attained great excellence, especially in its carved stick. Gold and precious stones, painting and miniature, in the finest papers from China, and taffetas from Florence, united to embellish it. The trade grew in importance, and the manufacturers were incorporated and enabled to make laws for its regulation, and were at the same time endowed with several privileges.

In the succeeding reign the manufacture reached its height in France, no less than five hundred manufacturers finding, it is said, employment in Paris in 1733. During the same period the fan came into general use in England, the feather fan being the earliest worn; and there appears to have been a considerable trade established here in the last half of the century, as we learn from a petition to the House of Commons. "The fann-makers' grievance, by the importation of fanns from the East Indies." "That the manufactures of fanns and fann-sticks, though it may seem slight to some, is certainly at this time of very great consequence to a very considerable branch of the trade of England, for that it employs multitudes of men, women and children, in

making the sticks, papers, leathers, in ordering the silk (which paper, leather and silk is manufactured in this nation); likewise great numbers employed in painting, varnishing, and japanning; and further, that until there be put a stop to the importation of Indian fannsand fann-sticks, of which it can be proved that 550,000 have lately been brought over, great numbers of poor people, continually employed in the work, must likewise inevitably perish."

Following this it appears that in the twelfth year of Charles I. a protecting duty of forty shillings per dozen was imposed upon fans, and, if painted, their importation was strictly prohibited. In the reign of Queen Anne the London manufacturers obtained a charter of incorporation, and thenceforth the trade of fans within the city was limited to the members of the corporation, and continued to flourish. Referring to the reign of George I., Nollekens, the eminent sculptor, tells that when his wife was a girl her father's intimate friend, Goupy (a well-know water-color draftsman, who died in London 1763,) was considered the most eminent of the fan-painters, and that fan-painting was then so fashionable that the family of "Athenian Stuart" placed him as a pupil to Goupy, conceiving that by so doing they had made his fortune; and we learn from other sources that Stuart originally gained his livelihood by painting fans. Maintaining its prosperity till toward the commencement of the present century, fan-making then began to decline, and finally collapsed on the removal of the protective duties as a part of the system of free-trade. About twenty years since an influential member of the Fan-makers' Company presented to each of his fellow-members a commemorative fan; and though the corporation is maintained, there does not now remain a fan-maker in London.

Throughout the eighteenth century the French successfully maintained their supremacy in the manufacture. But early in that centry fans of good pretensions were made in Italy, Spain, Holland, Germany, and also, as has been shown, in England. The Italian fan was often finely painted after some mythological or sacred subject of one of the great native masters, and had a simple and appropriate stick; the Spanish fan, richly colored, represented some incident of gallantry or love, the stick of mother-of-pearl, gaily carved and gilt; the small Dutch ivory fan of the end of the seventeenth century, beautifully painted by

one of the masters of the Low Countries, were frequently imported into Paris, and decorated in Vernis Martin were greatly esteemed; the German fan clearly possessed a marked nationality, with its painted ivory stick, sometimes ingeniously carved a *corbeille*; and, lastly, the English fan of about the middle of the century, was a production by no means destitute of taste. But the only fans produced in England at the present time are of the plainest character, made of paper or of white wood, sometimes coarsely pierced and decorated with rude groupes of flowers. A similar cheap manufacture is carried on at Vienna, whence many fans are exported.

The dress fan of a high character is now exclusively made in Paris. In no other city does a modern fan command a price of \$500, and the makers may well claim to have made all Europe tributary to them, admitting, however, that they cannot rival the cheap and remarkable quality of the Chinese fans. The fan-maker, *eventailliste*, calls himself the inventor or designer, and he well merits the title. He employs able artists to paint the principal decoration for the mount, and to carve and decorate the stick. These parts, which are produced under his direction, he combines and fits up, exercising a controlling taste, which gives a name and individuality to the works of the chief Parisian makers. Thus the fan, like the pin, is a work of many hands—the painter, the carver, the gilder and the jeweler, with several inferior artisans. In some instances the complete fan is the design of an eminent artist, who thus gives to it a uniform, harmonious character.

Some interesting facts relating to the Paris manufacture of fans appear in the report of the Délégations Ouvrières, Paris Universal Exhibition, 1867. It is stated that the fan-stick is specially made in the Department de l'Oise, and that mother-of-pearl, ivory, bone, sandal wood, and other domestic and foreign woods are used; the manufacture in mother-of-pearl being carried on at Andeville, and in other materials at St. Geneviève. The work is chiefly domestic, the artisan, his wife and children, taking a share in it, and frequently attaining great skill by their own untaught industry and talent. The finely-painted mount is exclusively Paris work, the most esteemed artists being frequently employed. The fans thus produced are made under the direction of the prin-

cial dealers in Paris, and usually represent some specialty which belongs to their produce.

In the eighteenth century the fan was used to record the event of the day. Fashion, music, literature, politics were alike made subservient to its power, and to an extent which can now be hardly imagined. The opera, the theater, the senate or the church became the medium of its exhibition. Thus, when Dean Swift's "Gulliver's Travels" appeared, all the principal events were depicted on both sides of the fan. The same result followed the production of the "Beggars' Opera," the favorite songs in which were painted on the fans, and "political emblems were so rife that a lady's opinion was as readily known by her fan as by her patches." A similar practice prevailed in France, and in the time of the Revolution their artists were fond of recording the principal events of the period upon fans, among which may be mentioned "The Mountain Child of the Republican Constitution," "The Triumph of National Religion over Atheism, Fanaticism and Skepticism," "The Fête of Agriculture," etc.

Occasionally (though very rarely) fans were adapted in their ornamentation to the useful. At the close of the eighteenth century a fan was advertised in the *World* especially adapted to the frequenters of the opera and was thus described: "The fans present at one view the number of boxes, including the additional ones; the names of subscribers, etc., and have been carefully compared with the plan of the house, as kept at the office."

In the eighteenth century fan-making was an extensive and important business, and called into requisition the talents of the highest and best painters, many of whom commenced life as fan-painters. In England at this period an Italian artist, named Pozzi, painted fans from designs supplied by West, Reynolds and Capriani, and which, according to Miss Burney, were painted on leather, thereby meaning "chicken's skin" which she described as being "more beautiful than could well be imagined." In like manner, France produced in the eighteenth century many artistic men with whose names fans are intimately associated. Amongst them may be mentioned Watteau, Godefroy, Frangenard, Boucher, Lelu and Willefils.

Occasionally, says Mr. Holt, the fan was made to perform the offices of "prompter" as occurred on the occasion of the market-

women of Paris, offering a congratulatory address to Marie Antoinette on the birth of the Dauphin, when the spokeswoman had the address (written expressly for the occasion by M. Dela Harpe) set down on the inside of her fan, and to which she repeatedly referred without the least embarrassment.

The art called "*Vernis Martin*" has been much employed in the decoration of fans, but little appears to be known of the original designer of this novel and beautiful work. Martin is reported to have been a coach-painter in Paris in the reign of Louis XIV., and was the inventor of the fire varnish which bears his name. He was probably skilled in all the heraldic and artistic decorations then lavished upon carriage panels. He has been described as "a famous painter and chemist"—his fame is celebrated in the verse of Voltaire; and it is evident that he was something more than a mere "*vernisseur*," as has been supposed. His fans, though remarkable for their fine varnish, are far more distinguished by the peculiar beauty and novelty of this ornamentation. "While the center design is usually by a master of the low countries or of the French school, the originality, and (if subordinate not less artistic) merit of the general tasteful decoration, its exquisite finish, brilliancy and color are surely the work of a master-hand; and whose but Martin's, who has given a name to this characteristic art? The number of his works testify that he had pupils or assistants, some of whom probably attempted to continue his peculiar manner; but their imitations, though few, are apparent, failing even in the great merit of the varnish, the secret of which probably died with Martin. Yet fan decoration to this day is not beyond the influence of his original taste."

In the spring of 1870 a loan exhibition of fans was held at the South Kensington Museum, London. It was part of the scheme of the "Department of Science and Art" for the art instruction of women. To promote this object, the department offered prizes in competition for fans painted by the students in the female schools of art in 1868; and again in 1869. The exhibition comprised over five hundred fans, many of them of the highest order of merit. Her Majesty Queen Victoria and the then Empress of the French contributed largely.

EVOLUTION AND ITS CONSEQUENCES.

“RETARDATION” continued terminates in extinction. Examples of this result are common; among the best-known are those of the atrophy of the organs of sight in animals inhabiting caves. It is asserted that the young of both the blind crawfish (*Orconectes pellucidus*) and the lesser blind fish (*Typhlichthys subterraneus*) of the mammoth cave possess eyes. If these statements be accurate we have here an example of what is known to occur elsewhere, for instance in the whalebone whales. In a foetal stage these animals possess rudimental teeth like those of many other cetacea when adult, which are subsequently absorbed. So also with the foetal ox; the upper incisor teeth appear in a rudimental condition, but are very early removed. The disappearance of the eyes is regarded by Dr. Packard, with reason, as evidence of the descent of the blind forms from those with visual organs. I would suggest that the process of reduction illustrates the law of “retardation” accompanied by another phenomenon. Where characters which appear latest in embryonic history are lost, we have simple retardation, that is, the animal in successive generations fails to grow up to the highest point of completion, falling farther and farther back, thus presenting an increasingly slower growth in the special direction in question. Where, as in the presence of eyes, we have a character early assumed in embryonic life, retardation presents a somewhat different phase. Each successive generation, it is true, fails to come up to the completeness of its predecessor at maturity, and thus exhibits “retardation,” but this process of reduction of rate of growth is followed by its termination in the part long before growth has ceased in other organs. This is an exaggeration of retardation, and means the early termination of the process of force-conversion, which has been previously diminishing steadily in activity.

Thus the eyes of the *Orconectes* probably exhibited for a time at maturity the incomplete character now found in the young, a retarded growth continuing to adult age, before the termination

of growth was withdrawn by degrees to earlier stages. With this early termination of growth came the phase of atrophy, the incomplete organ being removed and its materials transferred to other parts through the greater activity of "growth-force." Thus, for the reduction of organs we have "retardation;" but for their extinction, "retardation and atrophy."

III. ON THE CAUSES OF EVOLUTION.

1. *Inductive Reasoning.*

In the present investigation we are endeavoring to discover new principles, not to apply old ones. The work is similar to that which occupied Newton in his investigation of the law of attraction or gravitation. The process by which we arrive at general truths rests on the consideration of a sufficient number of observed facts, and the determination of qualities, which are common to all, we regard as a law. This process requires for its proper conduct a careful analysis and discrimination of the nature of the objects considered, otherwise fallacy will result. As exact analysis is not always observed by the average mind, this inductive reasoning is not always successfully employed by it, nor understood when presented by others. In the deductive process it is more at home. With an ascertained principle given, as something like a staff for the mind to lean on, its application is not so difficult; but to such a mind induction presents an appearance of uncertainty and even of confusion, and these will certainly exist until order is evoked by the first step—classification. The theory of evolution has thus been charged with confusion, as though it asserted that which overthrew the order of nature. But the confusion only exists in the mind of such critics. The order of the creation is one of the foundation facts, and thus enters the inductive argument as one of its elements. That conclusion which is consistent with this order cannot be regarded as its enemy.

2. *On Natural Selection.*

In endeavoring to assign a cause for the existence of the peculiar structures which define the divisions among animals, Messrs. Wallace and Darwin have proposed the now well-known law of Natural Selection. This states, that inasmuch as slight variations

appear continually in all species, it is evident that some will be more beneficial to the animal than others in its exertions to supply itself with food, protect itself from enemies, the weather, etc. It then asserts that those whose peculiarities are beneficial will excel those less favored, in the successful use of their powers, and hence will live better, grow better, and increase more rapidly. That by the force of numbers, if not by direct conflict, they will ultimately supersede the weaker and destroy or drive them away. Then, as there are many fields of action and possibilities of obtaining support in the world, that the weaker will first be driven to adapt such of these as their peculiarities may adapt them for, or not exclude them from. Thus all the positions in the world's economy are filled and the surplus destroyed. This is styled by Spencer the "Survival of the fittest;" an expression both comprehensive and exact.

This doctrine is no doubt a true one, and has regulated the preservation of the variations of species, and assigned them their locations in the economy of nature. It was natural that this great law should have been brought out by such men as Darwin and Wallace, who are by nature much more of observers of life in the field or out-door physiologists than they are (or were) anatomists and embryologists. Their writings in their chosen field of the mutual relations of living beings in their search and struggle for means of existence are admirable, and almost unique, especially some of those of Darwin.

It is to be observed, however, that they both (especially Darwin) start with the variations observed. This is assumed at the outset, and necessarily so, for "selection" requires alternatives, and these are the product of variation. Great obscurity has arisen from the supposition that natural selection can *originate* anything, and the obscurity has not been lessened by the assertion often made that these variations are due to inheritance! What is inheritance but repetition of characters possessed by some (no matter what) ancestor; and if so, where did that ancestor obtain the peculiarity? The origin of variation is thus only thrown upon an earlier period.

Another reason why natural selection fails to account for the structures of many organic beings, is the fact that in expressing "the survival of the fittest" it requires that the structures pre-

served should be especially useful to their possessors. Now perhaps half of all the peculiarities of the parts of animals (and probably of plants) are of no use to their possessors, or not more useful to them than many other existing structures would have been. It fails to account for many characters which express the relations of *Homology* and *Parallelism*, and is almost confined in its exhibitions to features which express *Teleology*. This objection has been insisted on by Kölliker, the writer, and by Mivart, and now Huxley, while defending Darwinism proper against the last named author, says that "what the hypothesis of evolution wants is a good theory of variation."

Plainly enough, then, nothing ever originated by natural selection, and as the present essay relates to the *origin* of types, little space can be given to its discussion; for natural selection, important though it be, is but half the question, and indeed the lesser half. It is to the great causative forces as are the gutters and channels which conduct the water in comparison with the pump and the man who pumps it.

3. On Teleology.

Two classes of structures have been alluded to: those which are useful to an animal, and those which are not useful; or the adaptive and non-adaptive. Nothing is better known than that animals are well adapted to their situations in the world, and for their needs as to supplying themselves with food, etc. Some part of every species is so constructed as to enable it to live under conditions where most other kinds of animals would perish. Thus the sea-rangers, among birds, as the great albatross, etc., possess long and pointed wings; while those that live in thickets or under cover have short, round ones, as grouse, woodcock, etc. Even our sparrows—those that love the bushes and swamps, as the song-sparrow (*Melospiza melodia*)—have short, rounded wings, while those that haunt trees have them sharper and pointed, as the chipping and tree sparrow (*Spizella socialis*, *pusilla*, etc.). Water-frogs have their feet webbed; land-frogs have small or no webs; while tree-toads possess sucker-like expansions of the ends of the toes, which secrete a glutinous fluid, by which they adhere to the trunks and leaves of trees. Finally, frogs that burrow have one or more of the bones of the base of the hind foot (*tarsus*)

modified into a projecting blade, like that of a shovel; and as they squat down, they literally sit into the ground, and are soon out of sight in the hole which they dig with these busy trowels.

Cave insects have long and delicate antennæ, and limbs, exceeding their out-door relations by much. Moreover, their usual lack of eyes is a clear case of the reverse of adaptation, *i. e.*, the absence of an organ where not needed.

Less attention has been directed to the non-adaptive characters, yet they are as numerous as the adaptive. I do not include under this head useless organs or parts only, but especially those which are useful, but whose peculiarities do not relate to that use as advantageous to it.

Notable examples of this kind are to be found in the characters which distinguish all of the higher groups of animals and of plants among themselves. It is easier to ask than to answer what advantages the mammalian skeleton possesses over the reptilian that it should have superseded it? What end was served by aborting the coracoid bone, which in reptiles supports the shoulder-joint from behind, answering to the ischium of the pelvis? I do not know how to answer this question on a teleological basis, although it involves one of the principal characters of the class of reptiles. What mechanical end was gained by withdrawing the rib-bones of two cranial segments into the cavity of the ear, to become the hammer, anvil and stirrup of the organ of hearing? Was it to perfect the auditory faculty? Scarcely; for birds possess as refined and as musical an ear as any mammals, and appear to be superior to them in discriminating power, yet in them the hammer is the basal element of the lower jaw, and the anvil supports it, being entirely outside the cranial walls. See again one ground of distinction between reptiles and batrachians. The base of the brain-case in the former consists of an axis of bony segments developed in the primordial cartilage, while in the batrachian it is a single bony plate, formed by deposit in the membrane which originally surrounded this cartilage. Who can assign any advantage of the one type above the other which can be looked upon as in any way related to the external needs of the animals of those classes.

Another example may be found in the ankle joints of reptiles, birds and mammals. In the first two, the hinge is between the

first and second series of tarsal bones; in the mammals, between the bones of the lower leg and the first row of tarsal bones. Something besides the superior mechanical advantages of the latter has given it predominance over the former.

To turn to the nautilus and ammonite types of mollusca, we observe beautiful illustrations of all the laws already stated. As is well known, these shells have their tubular cavity divided by transverse partitions. In the nautilus these unite with the outer wall by a plain angle, but in various genera which lead toward the ammonites, this margin becomes complicated. This results from an excessive growth of the peripheral part of the partition or septum, so that in order to confine it to the same space of contact it must be folded. This plication takes place in a symmetrical manner. The folded edge in *Aturia* forms a tongue-like loop on each side, on the outer surface. In *Goniatites* a fold is added on the back. In successive genera, other main folds are added, the last appearing nearest the center of the coil. These then become complicated by subordinate undulations which in the more complex forms become the axes of a double row of new lobes and folds, the whole presenting symmetrical lobate outlines of much complexity and beauty.

But another series of changes accompanies those of the septa, and are entirely independent of them. These relate to the various degrees of winding of the shell. The early form with simple septa (*orthoceras*) was straight, but others which succeeded began to turn their shell-making round an axis, thus commencing a partial coil. In some the coil was very open; in others it began close, and then ceased, the shell finishing straight. Others after such a course began to wind again, while some made a single turn near the middle. The most remote from the starting point (*ammonites*, sp.) made a tight and complete flat coil, while some, whose septa remained simple, did the same (*nautilus*).

The direct uses of these various forms of septum and coil are simply inexplicable, and that one of them was any "fitter" to "survive" than another, by virtue of its usefulness, is for me more than doubtful.

I am tempted to continue this theme, for it might be prolonged indefinitely by any one familiar with the details of anatomical structure, but will only repeat that the illustrations would be

drawn chiefly from the characters of the classes, orders, families and other higher groups.

It is not difficult to believe in the case of the useful structures first cited, that the law of natural selection has had much, probably everything, to do with the preservation of the animals possessing them in the various localities to which they are adapted. But that it has had opportunity to direct the lines of progress in the second series is not likely. That it had nothing to do with the origin of either, is certain.

4. On Growth-Force.

Every change by complication of structure is by addition; every simplification is by subtraction. Every addition is a matter of growth, which is carried on by a process of nutrition. The inquiry respecting the origin of new forms centers itself at once on the history of growth and the influences affecting it.

If, as I suppose, these additions, either adaptive or non-adaptive, be produced by an *acceleration** of growth, it is evident that the same immediate cause of that increase must be potent in both cases. That one of the "forces" is concerned in growth as well as in all the active animal and vegetable processes, is obvious to those who have carefully observed it. The fact that growth, like work, requires food for its progress and continuance, is reason enough for suspecting the existence of a force, and in some cases the relation between this force and other known forces may be measured.

Professor Henry pointed out these facts many years ago, and illustrated them by observations on the growth of the potato and of the egg. The starch of the former, a complex "organic" chemical compound, at first weighs much more than the young shoot of cellulose, etc., into which it is converted by the process of growth, so that a portion of the substance of the tuber has evidently escaped in some other direction. This was found to be carbonic acid gas and water, derived from the slow combustion of the starch, which, in thus "running down" from the complex organic state, to the more simple inorganic compounds, evolves an amount of force precisely equal in amount to the chemical force

*For the definition of this term see first article, in May No. of P. M.

(chemism) requisite to bind together the elements in the more complex substance.*

It is well known that substances differ in their capacities for giving out different kinds of force. This of course means their capacity for converting one kind of force into another. Thus, if glass be rubbed with silk, the motion is converted into electricity, while if it be rubbed by the hand heat is the principal result. In some cases chemical force, set free by decomposition, is converted into light; in others, heat; in others, to electricity, often- to several at once. But one substance, so far as known, possesses the power of converting this chemical force or heat into growth-activity, and that is the material out of which the living parts of animals and plants are composed. This is Protein, a compound of carbon, oxygen and nitrogen in the order of relative quantity, with a smaller proportion of hydrogen, the whole being often associated with still smaller quantities of sulphur and phosphorus. In its mechanical aspect, as the material out of which structures and tissues are made, it is called protoplasm.

This substance exhibits two different phenomena of force-energy, viz. : *motion* and *growth*. Motion is exhibited by contraction and expansion, but which is the active state and which the passive state is matter of question. Some physiologists regard "contractility" as the energetic state. Radcliffe believes that extension is the energetic condition, and contraction a rebound or discharge of the extending force. He finds dead protoplasm to be a dielectric, and believes that in life each muscular fibrilla acts like a Leyden jar. It has been demonstrated that the outer layer of the sheath of a muscular fibrilla is positively electrified in life, while the cut extremities are negative, and it is shown by Radcliffe that the inner side of the sheath becomes negatively electrified by induction. The attraction of the opposite electricities on opposite sides of the sheath compresses and elongates it, thus, according to his theory, producing muscular extension. The nervous cells and tubes he believes to act in the same way; the difference being that the walls and sheaths are in a state which prevents compression and extension. The phenomena of mus-

* Agricultural Report of Patent Office, 1857.

cular extension and nervous tension he believes to be terminated by a discharge of the force, such as takes place in electrical fishes, but in much smaller quantity. Thus motive force resides as a form of electricity in protoplasm, and in highly organized animals is specialized into *neurism*.

As to growth-force, all its exhibitions may be reduced to cell-division, cell-nutrition and cell-origin. Cell division exhibits two prominent varieties. In both the cell nucleus first divides; in the ordinary mode, the cell-wall contracts at opposite points, forming approaching plications, which, when they meet, divide the cell. In the other mode or proliferation, the divisions of the nuclei approach the cell-walls, which bulge opposite to them, forming diverticula, which isolate themselves by opposing contractions at the base, which meet as before. The nature of the force thus displayed is as yet only speculative, and its demonstration will result largely from observation on cell-origin from homogeneous protoplasm. Racliffe suggests an ingenious theory. He supposes that the protoplasm acquires an external layer differentiated from the internal mass by exposure to and contact with external substances, and that the electricity generated in the interior is distributed on the under surface of this stratum. That this induces opposite electricity on the external surface, which, as in the muscular cell, causes compression and therefore extension of the stratum. This extends itself beyond its contents, which may be attenuated, filling the space, or contracting, forms the nucleus.

This view will not, however, account for nucleus and cell division, which are the subsequent and principal exhibitions of growth force. Perhaps the following suggestions may throw some light on it. Should a polar tendency appear in the nucleus, were the protoplasm of the proper viscosity, the poles being of like electric name, would tend to separate by repulsion, thus forming the hour-glass shape so well known, and afterward division. This nucleus division would inevitably be followed by division of the cell-wall, if its inner face were electrified in opposition to the nucleus. For the wall being attracted toward it equally all round, the separation of the two nuclei would be followed by an incurvature of the opposite walls opposite the interval between the nuclei, in order that each should maintain a position equi-

distant from its center. Further divergence would result in the completion of the cell-wall of each, apart from the other. This process would be supported by nutrition of the cell, which proceeds by the passage through the cell wall to the nucleus, of additional protoplasm from the blood. Of course the prime question is as to whether polarity can appear in the nucleus. That growth is first polar, appears probable on consideration of the globular and discoidal forms of the lower animals, and that this principle lies at the basis of the growth of the higher is rendered equally probable by the phenomena of symmetry of different kinds, as bilateral, antero-posterior, etc. The electricity supplied to the outer sheaths of muscular fibrillæ from the nerves, is, according to Dubois Reymond, positive. That covering the surface of the nucleus must be thought to be positive also, if it be effected in opposition to the inner wall of the cell wall, which is known to be negative by experiment. But in that case it would be difficult to perceive why it should not fill the cell by attraction to the wall. If, on the other hand, it be a generator of negative electricity, it would retain its integrity and induce a temporary change in the wall. The transmission of protoplasm through the cell-wall to the nucleus would produce an accumulation of electricity to be discharged in extension, or a disturbance of equilibrium, to be followed by polarity and division; but the conditions under which these results would appear are of course unknown. The mechanical arrangement and condition of the parts would have much to do with it.

The present object is served if it is rendered probable that the action of muscle and growth are due to similar or the same force, and that the source of supply of the one is nearly related to the source of supply of the other.

We are, however, here in the arcana of life, and the forms of law which rise before the mental vision are but as the statues of Memnon that greet the toiler on the river of mysteries; they loom upon its banks in twilight, and the when, the how and the wherefore remain unanswered. But the river of Africa is yielding her secrets, and though the life that she nourishes may be the last she will give up, it is no less surely promised to the patient inquirer.

A great advance toward an explanation of the operation of this growth-force was made in the demonstration of the fact that

its highest exhibitions are confined to the multiplication of cells by division of preëxistent ones, by contraction of their nuclei and walls in lines which finally meet.

The construction of additional parts consists solely of this cell-growth, but the character of the result is of course dependent on the position at which this addition takes place. It may be at the terminus of a limb to add another toe, or on the wall of an artery to add a valve. It may be in the brain to add a band of fibers, or on the edge of a muscle to extend its width.

That tissues are made of cells of original or altered shape, separate or confluent (flown together) is well-known. That the arrangement of tissues into organs is due to the direction of this multiplication is also true. Thus, a gland is a collection of follicles, each of which is a bagging of a plane tissue. This bagging is an exaggerated convexity, which is occasioned mechanically by excess of cell-growth at one spot on a uniform surface. Solid parts are all formed in *the first instance*, of simple segments. These are parts produced in a straight rod by excessive elongation or growth; the process being as before, the division of cells and distribution of homogeneous protein between them. All this is derived from the study of *homologies* combined with embryology, and the result is wonderful, and simplifies at once our ideas of the action of the growth-force. It is mainly a repetition of cell-division, the result as to structure being entirely dependent on the influences which *locate* its activity and regulate its amount.

Now its amount will depend on the capacity of the existing organism to convert heat, etc., into it, and the form, as to tissue, etc., in which it appears depends no doubt on the complexity of the machines or organs of which the organism is composed. In the case of the higher organisms, we have muscle, converting the results of nutrition into muscle; skin and nails making more skin, etc.; brain making more brain; bone making more bone.

The prime question is the cause of the location of growth-force. Experiments on this point are greatly needed, and in their absence it will be necessary to take a wide survey of facts.

A given animal organism can only convert a given amount of force, and that capacity must remain uniform so long as the machine or structure remains the same. If, however, an addition to its capacity is developed in one quarter, a subtraction from

some other region must take place if the whole amount remain the same. When then a useful organ is added, subtraction from some less important locality must result, and as a consequence the latter must become still less prominent in the general economy. Hence the development of the useful class of organs already cited must always be accompanied by a corresponding disappearance of useless ones. This would be by reduction or retardation. But in the case of the complex folds of the margins of the septa in the ammonite, useless parts are added by acceleration. Here a gradual increase in the amount of growth force must be believed in.

Increase of growth-force, when not specially located, is seen in general addition to size. In domestication careful feeding, associated with protection against all exhausting exposure or exertion, tends to this increase of size. This is well known to be the case in hogs and cattle and animals of quiet and easy life. The reverse conditions, as poor food, exposure and *disproportionate* exertion reduce the size; witness the Maryland breed of cattle, and the semi-wild hogs of the Southern States. This matter is, however, nicely balanced with the production of motion, for if the latter be excessive, or the supply of material for consumption be insufficient, growth-force must be evolved in less amount.

It will be necessary here to state that the supply for the conversion of all the forces of the body is derived from the nutriment as circulated in the blood, and not by consumption of the substance of the organs themselves.

But the condition of plethora of growth-force is also the one highly favorable for the appearance of variations of structure. Domesticated animals are notorious for this variation, while the still more numerous examples of "protean" species in nature are always predominant forms, abundant in individuals and widely spread. For example the wolf, the red fox, the red-tailed hawk, the garter snake, the tiger, salamander, etc.

That the variability depends on a peculiar condition of the animals themselves, and not on domestication, excepting in so far as it produces these conditions, is plain, not only from the above facts, but from those observed in domestication. It is well known that while pigeons, fowls, cattle, dogs, etc., are variable or "protean," the peafowl (*Pavo*) has maintained its specific characters with great accuracy during a period of domestication as long as

that of the other species named. The same may be said of the Guinea (*Numida*) and the Turkey (*Meleagris*). These facts show that domestication is only a remoted cause of variability.

5. *On the Location of Growth-Force.*

With the fact of increase of general growth-force before us, have we any others which can guide us in fixing on a cause for its special location? It is plain that the useful additions which have constituted certain genera, families, orders, etc., what they are, must have been produced as a consequence of the existence of a need for them; or, on the other hand, being created first, they must have sought for use, and found it. But what are the relative chances of truth for these two propositions? In the second case, admitting evolution as proven (see article first), we perceive that an almost infinite chance exists against any usual amount of variation as observed, producing a structure which shall be fit to survive in consequence of its superior adaptation to external circumstances. It would be incredible that a blind or undirected variation should not fail in a vast majority of instances to produce a single case of the beautiful adaptation to means and ends which we see so abundantly around us. The amount of attempt, failure and consequent destruction would be preposterously large, and in no wise consistent with the facts of teleology as we behold them.

What of the opposite view? We have in its support the well-known facts of determination of nutritive fluid during use of parts, not only for supplying fuel for the motions of use, but also for growth-force and material for the increase in bulk of the part used. Who has not remarked the increase in size of the hands of the laborer, of the nails of the sewing woman? Who cannot remember some of the countless examples of certain modifications of form being associated with special excellence of use of the parts in different races of the same species of individuals of common parentage, showing that they must have grown with the history of those races? Who does not know the short, wide jaws of the bull-dog, with its oblique teeth, occasioned by the expansion of the zygomatica to accommodate the huge temporal muscles so necessary for maintaining a firm hold of its enemy. Then the long and full nose of the hound, and its more extended turbinate bones; how closely is this connected with its developed scent;

while the light muscular forms of the greyhound are undoubtedly necessary to its well-known speed. If it be said that these variations have not resulted in a single change of structure worthy of note by a systematist, we can point to the Japanese dog, where the excessive reduction of the jaws anteriorly has resulted in a total loss of the incisor teeth and some of the foremolars. The loss of molar and incisor teeth from shortening of the jaws, in the human species, has been already noted. The number of such instances is very great, but as space to enumerate them fails, it is only necessary to add that they are characters of high importance in a systematic sense. Their importance will be more readily conceded in remembering the proposition stated in the first article, that species are simply isolated varieties, and of similar origin.

Confirmatory of this view are the facts already cited with reference to the relation of motive to growth-force. The force involved in both being seen to be similar, perhaps indential, the former represents its energetic state as discharge and motion, the other energetic without discharge, in the growth of cells. And whatever determines this force to a given part of the body must then probably result in both of its exhibitions, dependent on the kind of cells which receive it. As above remarked, the conditions which determine the result are unknown, except that the two kinds of muscular cells are the only ones in which elongation is strongly marked.

Another reason for believing in use as a cause of structural change, is the manner in which the same useful structures have evidently appeared on totally distinct stems, as an evident adaptation to the same circumstances in which the different types have been equally placed. Thus the birds of prey possess the hooked, mostly toothed beak, appropriate for tearing and destroying animals. Their stock is the same as that of the cuckoos and parrots, and even of the pigeons. The butcher-birds are of the division of songsters, not widely removed from the thrushes, and far enough from the raptorial, yet the same hook and dentate bill reappears in them, as adapted to flesh-eating habits.

Among the reptiles, which were no doubt originally land animals, and derived from batrachians, we have a large number adapted to swimming in the ocean, and these not all of the same

stock. Thus the *Plesiosaurs* are crocodilian in relationship, while the *Pythonomorphs* of America were of the same that produced the snake and lizard. Again the same modification appears in the Cetaceans or whale, etc., among mammals which are primarily a terrestrial division.

It is a nice point of *phylogeny* (or the science of genealogy) to ascertain whether adaptive or strictly "bathmic" (or embryonic grade) characters came first in a time in a given group. Among frogs we have four divisions. One has an embryonic mouth and embryonic breast-bones; another embryonic mouth and complete breast-bones; the third embryonic breast-bone but complete mouth, and the fourth with both complete. The first is the lowest and probably the oldest in time; agreeably to this supposition it is distributed over the whole earth. The second is East Indian and African; the third and most extensive is Australian and American, while the fourth is confined to the Old World and North America. The second, third and fourth divisions possess corresponding series of genera of different structure adapted to different modes of life. Some have shovels for burrowing, some webs for swimming, and some pallettes for adhering to branches and leaves of trees. If these characters were first fixed, then those with the more perfect breast-bone and mouth are descendants of those with the less perfect; if on the other hand the conditions of mouth and breast-bone were first fixed, then each division thus defined in its special region was modified into the subdivisions, each adapted to a special mode of life. I have called these parallel divisions "homologous groups," and probably the origin of the embryonic modifications has sometimes come first, and sometimes the adaptive structures have preceded. Nevertheless the lowest or most embryonic division will often have developed its own adaptive divisions, and each of these will agree in producing descendants which have advanced in the embryonic scale, and so produce homologous groups.

For these and other reasons it is concluded that the useful characters, defining natural divisions of animals, have been produced by the special "location of growth-force" by use. Useless ones have been produced by location of growth-force without the influence of use, or by its subtraction, due to a disturbance of equilibrium, consequent on the special location elsewhere.

But we go back to the origin of the question in investigating the action of growth-force undisturbed by the interference of locating influences. This is only to be ascertained by an examination of lower organisms in connection with the higher. A point that first strikes the student of higher animals is, that after he has proven the law of *homology* to be true as regards different animals when compared, he further finds that the parts of the same animal are also homologous, that is, right hand and left, front and behind, bottom and top are also constructed on the same plan, so as to be reduced to the same elemental parts. This is described under the names of "antero-posterior" and "bilateral symmetry," etc.* These laws apply to all parts of the organism, and though there appear to be exceptions these are traceable to a common symmetrical type, the change wrought being one form of specialization. It is not surprising then that the lower we descend in the scale of life the less marked is the departure from the entirely symmetrical disposition of parts as regards the common center. This is beautifully seen in the *Radiata*, etc., where the jelly-fish, the star-fish and the sea-urchin are familiar examples.

But these are complex compared with forms below them. The minute *Polycistina* construct shells of beautiful sculpture or tracery; but though they present many forms, they may be all referred as modifications to the symmetrically marked disc. Of cellular animals, *Trichodiscus* represents a discoidal aggregate, and *Actinophrys* a globular mass of cells. *Monas* and its allies consist of one or several cells in globular form.

Lastly, in the first appearance of life in the most complex animal we have first a cell, which then "segmenting," divides itself so as to become a globular mass of identical cells, arranged about the center.

From the cellular animal upward the operation of addition of parts is then one of *repetition*, and that centrifugally in the case of bodies which are developed in all planes, or peripherally in those which are in one plane.

Thus the complication of the edges of the septa of the ammonites is accounted for. First, the growing animal was supplied

* See Prof. B. Wilder, on. Proceed. Boston Society, Nat. Hist., p. 18.

with an excess of growth-force. The type of the preceding generation being strictly adhered to according to the laws of inheritance, the only opportunity for its exhibition was necessarily *after* the inherited parts were completed by acceleration. The results could only, therefore, be exhibited on the edges of the new septa, and free margin of the outer wall. As the older growths mechanically restrained the new septa from mere extension, folding or plication must have resulted from the crowding of additional surface into the small space. This folding would take the form of simple branching, and then "repetition" of the process, by a refolding of the outlines of the first fold. The edge would thus have the digitate or primatively branched appearance it is known to present.

Another case of folding is that of the brains of the higher mammals, including man. This was occasioned by excess of growth-force distributed to the circumference (from an inherited central region), exceeding in amount that of the space (skull) in which it was inclosed. Folding was necessary for its accommodation in the contracted space. This is a highly useful modification. Another case like that of the Ammonite above cited, whose use is not so readily determined, but which illustrates excess of growth-force on some other account, is that of cotyledonary leaves in some plants. In these cases the growth of the leaf is accelerated, requiring plication for its accommodation.

We therefore have the two laws regulating the "location of growth-force" irrespective of use, viz. : 1. The centripetal or polar tendency ; 2. the peripheral tendency, directed by the inherited central or first grown parts.

There is however another element which in animals disturbs the symmetrical direction of growth-force besides use, and which precedes use, *i. e.*, effort. Use presupposes a part to use, and a simple part is sufficient for its influence, so that it be *usable*; but the first beginnings of few structures are usable. As Mivart has objected to natural selection, that the first rudiments of organs could never be sufficiently important to an animal to give it a preference in the struggle for existence ; so it might be urged against the theory of use, that rudiments are generally *useless*, and could not have been originated by use.

The effect of use is however two-fold. The contact with ob-

jects used has some effect in stimulating nutrition, as well as the exertion of the muscles necessary to use. But determination of nutritive fluid is well known to be under the influence of nerve force. How does imagination stimulate the secretion ; a familiar example is seen in the flow of saliva in anticipation of food ; a very different one is the phenomenon of blushing under emotional stimulus. Nevertheless it is not evident that growth can result with any such facility in a fully grown animal. It is thought that the effort becomes incorporated into the metaphysical acquisitions of the parent, and is inherited with other metaphysical qualities by the young, which during the period of growth is much more susceptible to modifying influences and is likely to exhibit structural change in consequence. Certain it is that acceleration ceases with growth, and as the young of animals are not in complete relation with the surrounding world, the influences controlling it must be inherited. This consideration renders it doubly probable that the results of effort on the part of the parent appear in change of structure in the offspring.

Of course immense numbers of cases of continued effort can be produced by the objector, in which no structural modification has resulted. There are various reasons why a modification should not take place. In the first place the exertion of use must be great, habitual and long continued ; in the next place abundant food must be at hand ; finally growth-force must be to spare in the growing young either from some less necessary part, or by excess ; now cases are probably not rare where none can be spared from another part without injuring the efficiency or viability of the animal ; hence all such changed individuals would perish through natural selection or disease.

Domesticated animals can be pointed out where effort and use have long been put forth in the service of man without changing structure. But such effort is not to be compared for a moment with that put forth by animals in a wild state in seeking food or protection from enemies. The protection furnished by man, and consequent release from the struggle for existence, has reduced the chances for such variations greatly. Nevertheless variations profitable to man have resulted ; witness the race-horse and carter.

In cases where one side of the body is used in excess of the

other, under some mechanical development, would be counteracted by the law of polar or centrifical growth, all that might be acquired by the one side being inherited by both. Even this original symmetry has, however, been overcome in some types, as in the flounders (in the jaws and teeth as used parts). This part of the subject is purely hypothetical, however probable, but the aspect of the discussion will be materially brightened to the reader if he have previously adopted, with the author, the principle that evolution has been the mode of origin of the present life-forms of the earth.

Reverting now to those beings which are either in part or entirely destitute of the power of determining these movements, as plants, various causes present themselves as modifiers of the polar or centripetal activity of growth-force. In the case of a plant, the medium in which it grows modifies the result; for example, the downward drawing axis or root differs much from the upward aërial portion or stem. Aquatic plants, supported beneath or on the surface of the water, lack the strong stems and braces necessary to air-growing plants; while of the latter, those with weak stems develop tendrils and other supports. In these cases physical laws have been the guides of growth-force. In the case of bright colors, which we know to be impossible in vegetation without sunlight, the influence is chemical.

The first physical law is, that growth-force, uninfluenced by inherited peculiarity,* or any influence locating a nutritive fluid, must develop extent in the direction of least resistance, and density on the side of greatest resistance, when not too great. The illustration of this statement would be that a globular mass of cells brought to the point of junction of two media, as water and earth or air and earth, elongates in the direction of the medium presenting the least resistance, *i. e.*, air. Thus a longitudinal development would originate from a centrifugal, and a repetition of the same process would produce branches. The reason why repetition should appear along the sides instead of as continued prolongation of the axis, arises probably from the difficulty of conveying fluid nutritive material far from the base as a source of supply, and the occurrence of various mechanical obstacles easy

*This is supposed to be due to atonic peculiarity of cells.

to be conceived. In low plants, where nutrition is absorbed by all parts of the axis, which branch, as the subterranean parts of fungi, (*mycelium*) difference of local supply would produce an effect. In higher plants, where fluid nutriment is only introduced at one point (the root), and conveyed by special layers of cells or tubes, the difficulty of maintaining supply at a distance from its source, would encourage lateral repetition or branching.†

EDW. D. COPE.

AMERICAN ANTIQUITIES.

THE sources of Ancient History fall under two heads, *Written Records* and *Antiquities*. *Written records* are either *inscriptions* on public monuments or *books*. *Antiquities* are "the actual extant remains of ancient times, whether buildings, excavations, sculptures, pictures, vases or other productions of art."

It was by the interpretation of hieroglyphics found on the rocks and monuments, and by a most careful and searching study of their antiquities, that historians had generally become agreed about these ancient nations. Yet after laborious investigations the best English Egyptologers dared not go farther back than the year 2700 B. C. as the date in the first dynasty in Egypt.

But since the discovery of the famous lake dwellings in Switzerland, in 1855, Europe has experienced a reformation in the study of antiquities. No longer do we measure the history of man by years merely, but by ages and geological periods.

During the season of unusually low water in the Swiss lakes, in 1855, piles were found projecting from the bottom of one of the lakes, which upon examination proved to be regularly driven, and under circumstances that precluded all possibility of their having been placed there by any modern nation. A closer ex-

†The great power exerted in a given direction by growth-force due to gradual acquisition and inheritance is illustrated by the plantain, *Plantago major*. Although without axis, it has been observed by Jas. C. Cresson, in the Philadelphia Park, and Alfred Cope on his drive, to force itself through a solid bed of hard vulcanite pavement, several inches in thickness. It is so far the only plant observed to possess an equal amount of power.

amination revealed human bones, curious implements of stone, and such appearances as clearly indicated the habitation of a race of men that had long passed away. The search was continued in other places and in other lakes, with marked success. No sooner was the news spread over Europe than antiquaries and enthusiasts either hurried to the spot to assist in the explorations and collect specimens, or treasured every item of information relative to a discovery so important and so unique. Not only was Switzerland subjected to a searching examination, but France, Belgium, England, Ireland and even Scotland, were forced, under the enthusiasm and excitement that followed, to yield up treasures of a like nature either long neglected or else buried in obscurity. So successful were the investigations that a large number of lake dwellings and towns were found; and the collections of relics from other places increased rapidly enough to enable a number of authors to publish descriptions of the discoveries.

The all-absorbing questions with the general public were, When were these towns built? At what time did these people flourish? To answer these questions was impossible. Everything, or almost everything in connection with this race of men, was buried in conjecture, yet by giving the imagination full play, and by loosely following the strict rules of induction, some authors have been able to picture the government, life and occupations of this extinct race to the partial satisfaction at least of the general reader. As for their age, no two are agreed; some trace them down to the days of the Roman Empire, others compute the date of their existence at 60,000 years ago.

The interest excited in Europe over these discoveries soon spread to America, and helped to turn the attention of many to a study almost neglected here. Ever since Agassiz asserted that the Laurentian hills, which extend along our famous north-eastern boundary line, were the oldest dry land in the known world, he at once vindicated the maturity of our manhood and established our position of equality with the most ancient nations; so that what has usually been termed the New World, and has been commonly believed to possess no relics or records of human history, to be placed by the side of the antiquities of the Eastern hemisphere, has thus assumed the foremost rank, at least as respects the age of its geological formations.

Previous to this announcement by Agassiz, and the discoveries

in the Swiss lakes, certain facts in natural history seemed to prove that the primitive forms of life were introduced on our soil long after they had flourished on the other continent. Certain types of fishes, long extinct in the other hemisphere, are still extant in our lakes. The gigantic monsters of paleozoic periods apparently continued on this continent to a comparatively recent date, and were even associated with man not many generations back. But with Agassiz for an authority we may safely infer that this continent was prepared for habitation before any other, and that the relics of *our* original population have not only an enhanced interest and value as monuments of local arts and manner of life, but as universal types of primeval history.

Till of late we have not been accustomed to look upon the implements and ornaments of stone so frequently found in this country, as of any particular historic value; but *now* the "Age of Stone" has attained a significance never before acquired; and flint axes and arrow heads, as associated with geological phenomena, are classed among the most important exponents of the condition of mankind, the world over, in primitive or prehistoric ages. It is thus that an animated and exciting specialty of a popular character has been rapidly developing for archaeological exploration; what flint hatchets and arrow heads may possibly signify has already been pointed out in a literature now voluminous in Europe; and we are to-day importing the means necessary to study our own antiquities.

But let us turn now to America as the widest and oldest field for investigation. Some of us can well recollect what an impression Stevens' great works on Central America and Yucatan made on their first appearance; all of us know with what interest we have examined those hideous hieroglyphics so faithfully represented in his books. What could those characters so plainly cut in the monuments and temples mean? No one knew. But now, just in time to add another incentive to the new interest over antiquities, comes an enthusiastic antiquary, the Abbé Brasseur de Bourbourg, who pretends to have found a key to the phonetic alphabet of the Mayas of Yucatan, in the library of the Royal Academy of History at Madrid. "The alphabet and signs," says the excited Abbé, "have been to me a Rosetta stone. Now nothing is wanting. I am master of all the inscriptions, in spite

of the numerous variations in each character." In 1868 this Abbé published a large volume entitled, "Four letters upon Mexico: An absolute explanation of the hieroglyphic system of Mexico, the end of the age of stone, the temporary glacial epoch, the commencement of the age of bronze, the origin of the civilization and the religion of antiquity, derived from the Teo-Amoxtli and other Mexican documents."

By means of this key the Abbé has succeeded in raising the veil that for so many centuries has covered the mysterious history engraved upon these antediluvian monuments. He has discovered dates in chronology which transcend the most ancient history of Egypt; the Mexican annals, it seems, go backward, by periods of thirteen years, to about 10,500 years before our Christian era. They begin when man was still a savage in the middle of the glacial period. The regions where they especially present men in those remote times are the countries then said to extend from the shores of the Gulf of Mexico to Europe and Africa. Here lay that long lost island of Atlantis, famed in classical traditions, and it was here especially that the nations of the so-called age of stone dwelt. In short, the Abbé assures us he can prove in an irrefutable manner that the languages, civilization, arts, and sciences of Egypt, India and Persia, as well as of Europe and Africa, proceed entirely, and without any exception, from America.

"Here," says the Abbé "was the first cradle of civilization; and if I rightly understand the ancient typography, it is on the Great Antilles where men first united into society; * * * * and since the very first centuries of civilization a lively commercial interchange was established from Quito and Yucatan to the shores Europe and Africa." But this cradle of civilization (this inter-Atlantic region) has long since disappeared, swept away by cataclysms or inundations, which caused the depression of that part of ancient America covering the Gulf of Mexico, the Caribbean sea as far as the Orinoco, and extending some hundreds of leagues toward Africa and Europe. The Abbé details the entire history of the rise of the mountains and the sinking of the ancient land.

But I pass from these specimens of the extraordinary positions assumed by so learned an enthusiast, whose works fill seven octavo and two quarto volumes, to the discovery of another Frenchman,

C. S. Rafinesque, Professor of History and Natural Science in Transylvania University, who was seized with similiar fancies respecting the hieroglyphics and symbols of our own tribes of Indians. Rafinesque (I here quote from the proceedings of the American Antiquarian Society, from which I have already taken extracts) "undertook to interpret the painted records of the Linapes by means of the native songs connected with them, of which they were the signs and emblems. These representations upon wood, and bark and skins, and also in the form of wampum belts or strings, were common to the Chippewas, the Ottawas, the Sakis, and the Shawanis. These he conceived to constitute the peculiar graphic system of this portion of the continent, different from the Mexican, and probably imported from Asia. Pursuing his investigations among these materials, assisted by the principles of philological analysis and interpretation which then prevailed among the prominent philologians of Germany, he raised on such foundations an historical superstruction not less marvelous than that of the Abbé. Rafinesque, like the Abbé, went back almost to the beginning of things, including an account of the manners, customs, arts and sciences of the people of Atlantis at the time of the submersion of that country in the ocean that retains the name. His historical periods: First, from the dispersion of mankind to the original discovery of America, including several centuries; second, from thence to the foundation of the Western Empires, including some centuries; third, from the foundations of those empires to the great Pelagian cataclysm, several centuries more; fourth, from the Pelagian cataclysm to the invasion of the Istacan nations, about twelve centuries; and fifth, from that period to the decline and fall of the Atlan and Cutan nations, and extending to the present condition of things. * * * * There was, he had ascertained, a great Atalan empire, whose metropolis was somewhere on the Ohio river. The monarchs of this empire often contended for supremacy with the monarchs of Africa, Europe and Atlantis. An intercourse was kept up more or less regularly between all the primitive nations from the Ganges to the Mississippi, until the great catastrophe which severed the two hemispheres; the eastern nations taking it for granted that the whole American continent had sunk, as Atlantis and many Antillan islands had done." It is impossible here to give any adequate

idea of the number and variety of prehistoric facts which Rafinesque thought he had discovered beneath the veil of American signs and symbols. But what do these things mean? Here are two extraordinary and analogous cases, two systems of interpretation and their results, which appear to have been wholly independent of each other in origin and progress.

Rafinesque flourished forty years before the Abbé, who scarcely notices the former in his own great works. Can it be that these two men are victims to an unnatural and forced development of a particular train of thought? They are apparently sincere and in earnest, and their conclusions seem to have arisen gradually and consistently from diligent and protracted study. Rafinesque came to this country in 1802, was intimate with the leading naturalists of his day, and traveled largely about the States with those habits of observation which belong to his pursuits. His studies of American archæology and philology were unusually thorough and complete, and he was the author of many laborious works upon these subjects. The Abbé Brasseur de Bourbourg was educated in Rome, and in 1845 came to this country to fill a professorship in Quebec. He made the study of Mexican antiquities the great work of his life. He visited Mexico as a member of the French Commission in the reign of Maximilian, and there familiarized himself with the dialects of the country, as well as its monumental inscriptions and remains. He had the highest and best means and opportunities for information joined with zealous and long-continued application of mind to qualifying studies. Whether his discovery of the key to these hieroglyphics and his translations of them are to be accepted in every respect as true must depend upon more thorough examination and proof before the skeptical will be satisfied.

American Archæology demands study. Peru, Central America and Mexico present a great field for research, which can not soon be exhausted. But there is a field nearer home. Two or three days ride to the west brings us into the heart of it. Up and down through the great western river bottoms and valleys are those famous *mounds*, of many shapes and sizes, and filled with a great variety of curious antiquities. Unfortunately for the development of these vast archæological resources this country is wanting in enthusiastic and independent antiquarians, men who, like the

famous Lord Kingsborough, would be willing to spend their fortunes and their time in collecting and recording our antiquities. Mr. Peabody has, however, endowed Harvard University with a fund of \$60,000 to found a Museum of Archæology, and Prof. Wyman, who is now at the head of it, is collecting such specimens as he can. And we may hope soon to see a large collection of relics, sufficient to enable antiquarians to draw safe conclusions in regard to the primitive history of this continent.

Let me now add a page from my own investigations on this subject. Late in the fall of 1870, I was at Chester, Illinois, eighty miles south of St. Louis, on the Mississippi river. I had been there for some time, and was just upon the point of returning home when an incident occurred that has eventually led to the writing of this article. It was Saturday; we were patiently waiting for some passing steamboat to carry us off, when there crosses from the Missouri side of the river a young fellow having a curious relic he had taken from the bluffs on that side the stream. This relic was apparently an idol, or decanter shaped like an idol, representing the figure of a man in a sitting posture, with the arms folded. It was made of dark-colored clay, very hard, and showed no signs of decay. There was a hole in the back of the neck, and the figure was hollow. It was about a foot high, and seven or eight inches in diameter. Soon after several men crossed the river, having a number of curiosities, including one idol of larger proportions than the first, representing a woman with the hands resting on the knees. They had, besides, bottles, kettles, pots, and a sauce-pan with a handle hollowed at the extremity and filled with pellets. The larger bottles were shaped like modern decanters. All were well executed in clay, and showed no signs of age.

Upon inquiry I found that that portion of Missouri where these curiosities had been found was thinly settled and neglected. But after the war the farmers worked with security and on a more extensive scale. New fields were plowed up and new roads were made. And it was near the lime bluffs opposite Chester, in a deep rut made by heavily laden wagons, that some human bones and an odd-looking bottle of clay were unearthed. Information of this discovery was at once given to a Mr. Christian, long known throughout that region as an indefatigable hunter of Indian antiquities. Christian's residence was at Chester; his education was

very limited ; a brick-layer by trade, and ready to endure any toil, exposure, or pecuniary risk to further his aboriginal researches. He has discovered many valuable curiosities, among which I might mention a petrified *tantilus* of more than a hundred pounds in weight. Seldom rewarded for his exertions, and often laughed at for his indefatigable zeal, he still, at the age of sixty or more, continues his investigations through all the country round. The party recently from the new field of discovery reported Christian as there, and the prospects good for many more relics. Great curiosity was excited in the town at these discoveries ; and becoming anxious to investigate the spot, and secure some of these relics of barbarism, I crossed the Mississippi in a skiff early the next morning, and tramped through the cotton-wood forest of the "bottom lands" toward the bluffs five miles away. I was soon lost in the entanglement of trees and vines, but regained the way and reached the bluff safely, when the excavations were soon found. These excavations had been-made on the side of a gently sloping hill, elevated from fifty to an hundred feet above the "bottom land." The soil is of a rich, dark loam, yielding fine crops of corn every year. There was every indication of an old Indian settlement there. All over the hill were scattered pieces of flint. At one side was a deep ravine with a spring of water. The top of the hill was covered by one of those circular mounds peculiar to Indian fortifications, and unquestionably the work of human hands. Some suppose this was the scene of a great battle ; at all events, there were hundreds, yes, thousands, perhaps, of aborigines buried in this hill, from a few inches to three or four feet under ground. Without an exception, where the entire body had been buried, the feet were toward the rising sun. Many skulls, disjointed bones, vertebræ and broken bits of pottery had been buried in an apparently careless manner ; though, I believe, no skulls were found that were not face uppermost, and laid in a general direction from east to west. As soon as a "trace" was found, it was followed up to the skull ; for it was always around the skulls that the earthen bottles and other curiosities sought for were placed. If the trace revealed the bones of a grown person, the specimens found were sure to be of large size ; while vessels of inferior workmanship and smaller dimensions were found at the heads of children.

On my arrival a group of horsemen were idly watching Mr.

Christian, who was hard at work digging. Friends are made in a few moments in the West. Christian seemed delighted at the prospect of a co-worker for a day or two. Our only tools were a mattock (not the *bidens* or *tridens* of Latin grammar notoriety, but an affair with a single tooth), a hoe and a butcher's knife—the latter of great use in probing round the skulls for pottery. About noon that day we unearthed a choice lot of vessels, among them a small idol representing a woman. We worked on till night with varied success, exposing in all eight or ten skeletons. It was Sunday. The character of the region all round about was wild and rough. There were no churches within miles. Right or wrong, never before had I so plainly seen "sermons in" the bones, if not in the "stones" before me. The rough Missourians, as they rode by, jested over this "premature resurrection" (as they called it) of the skeletons we had exposed. But the strange circumstances furnished us all with food for more serious reflection. As the mattock or hoe clashed into the ribs and joints, and pulverized, scattered and mixed with the earth the decayed bones of the Indians, it was plain how the soil was enriched, and a future nourishment for grass, corn and fruits provided, which would eventually circulate back into the bodies of another generation.

According to the poet:

"Jam seges est ubi Troia fuit, resecandaque falce,
Luxuriat Phrigio sanguine pinguis humus."

Some of the bones were evidently those of men of large stature; the vertebra of one man, Christian assured me, was a third larger than any he had ever seen. All the skulls were inferior in shape. The jaws were large and strong; the facial angle low and the forehead contracted. Roots of trees and the pressure of the earthenware had in some cases horribly distorted the skulls. In our zeal to follow up a trace, we dug a trench directly across the traveled road, which obliged us to cut away the trees and open a new road below. Bits of muscle shells, apparently, a claw of some animal, burnt stones, charcoal, a lump of lead nearly a pound in weight, and an ornament for the neck were found.

Here is a rare opportunity of studying Primitive Man in America. The readers of Figuier, Lubbock, and other such writers, could with a little research and imagination easily draw up a do-

mestic scene, a feast or a battle, from the relics so thickly strewn over this hill. So valuable a field did Christian judge this for the archæologist that he leased it to prevent any disturbance from outsiders. Yet he would gladly welcome, and even share, his discoveries with any one who was really interested in advancing the study of antiquities.

As night came on Christian left this "Valley of the Shadow of Death," and passed up into the "Delectable Mountains," or rather upon a hill, when we spent the night in a log cabin.

Early the next morning we resumed our excavations, and by four in the afternoon had disclosed a large number of skeletons and odd bones. We discovered about a dozen vessels of different shape; some pestles and numerous broken bits of pottery. Some of these last, when entire, must have been vessels as large as any Vermont sugar kettle.

Business hurried me back to Chester that afternoon; once more I tramped through the cottonwoods, this time laden with several specimens of archæological interest. Happening to be in Chester again in the following spring, I heard that Christian was still digging where I had left him six months before. I accordingly visited the Indian graves again, secured the entire collection of antiquities dug up by Christian, and sent them to the East. They are now at New Haven under the care of Prof. Marsh. This is but a single instance of hundreds of such mounds and graves, scattered over the western and southern river valleys. The history of these mound-builders is almost unknown; and yet the subject is one of great interest to any who have the time and inclination to investigate antiquities. Is it to be hoped that before these mounds are plowed down and destroyed by the western pioneers that their external character, as well as their strange contents, may be safely preserved, so that it may no longer be said of the oldest continent, that it is behind any other in the knowledge of its primitive history and archæology.

ALFRED D. CHANDLER.

THE PHILOSOPHY OF THE FRENCH REVOLUTION.

BY PAUL JANET.

Translated from the Revue des Deux Mondes, by O. H. K.

THE CRITICS OF THE REVOLUTION.

IV.

THE year 1852 brought about a great crisis in the Philosophy of the French Revolution. A deep deception, a complete deviation from principles, supposed at least to be dear to the country, an unfortunate tendency to sacrifice the moral to the national results of the Revolution, a new form of absolutism springing up under the prestige of ideas which should of themselves have forever banished despotism from the world,—and, at the same time, a more extended knowledge, a comparison of our condition with that of neighboring nations, the sad conviction, too much justified by experience, that several of these nations, without so many crises and misfortunes had attained little by little, in the course of events, that political liberty of which we dreamed and of which we were still in want, and had even gone beyond us in certain great social liberties, while a great people across the Atlantic had at once realized in its full extent that grand programme of liberty and equality, of which we were about to abandon one-half, with no surety of not being compelled later to give up the other. All these views, reflections, experiences and comparisons contributed to throw doubts on that belief in the Revolution in which all shared to some degree, the wise with reserve, the enthusiastic with fanaticism, but which seemed to form part of France's belief in herself,—a belief which so much greatness in the past, and so recent a past, seemed to justify.

From that time a new direction was given to the theories of the French Revolution. Critics began to be struck with the small respect the Revolution had for the liberty of individuals, its worship of force, its idolatry of a central power; and began to ask,

if in establishing equality of condition in the modern world, the Revolution, like the Roman Empire in former times, had not paved the way for a new form of despotism.

No publicist was more struck with this thought than the celebrated and penetrating Alexis de Tocqueville. First, in his very original book, "*On Democracy in America*" he, in a time of peace, moderation and constitutionality, threatened modern nations "with the tyranny of the Cæsars," a strange prediction, which no circumstance, event or apparent symptom seemed to authorize. Later, justified in some measure by events, he again took up the thought and developed it with the rarest sagacity in his work on "*L'ancien Regime et la Revolution*." In it he refutes those who believed that the Revolution was essentially anarchical; undoubtedly the Revolution was destructive; since it was called upon to put an end to the feudal *regime*, it had to attack at once all the established powers, counteract all recognized influences, blot out tradition and "as it were to clear the human mind of all ideas on which, up to that time, respect and obedience had been founded." There was nothing left but debris; from the midst of these ruinous heaps arose an immense central power, absorbing and swallowing up in its oneness all the small divisions of authority and influence, heretofore dispersed among the secondary powers, and scattered here and there through the social body—a power, whose equal has never been seen since the fall of the Roman Empire. The governments founded by the Revolution are unstable no doubt; but unstable as they are, are a hundred times stronger than their predecessors, "unstable and powerful from the same causes." Following the example of the Revolution, the new princes in their turn destroyed everywhere the middle powers, to establish their own despotism; the Revolution which had been "their scourge" became "their instructress."

But if the Revolution may serve as example to absolute monarchs, it must be remembered that it only followed the example given by previous absolute monarchies; so it is true, as De Tocqueville says, that it made less innovation than is generally believed. It astonished by its sudden and extraordinary explosion; but this explosion was only the result of a long process in which many former generations had labored together. When the Revolution began, it was taken for an accident; afterward, when it had continued

and horrified the world, it was called a prodigy, a monster, a "miracle," which is DeMaistre's name for it. De Tocqueville established that it was neither an accident nor a miracle, but had had a previous existence during the *ancien regime*. Instead of showing it as destroying everything, as its adversaries alleged, or as reconstructing everything, as did its admirers, De Tocqueville showed its secret and deep connection with the *ancien regime*, and in this manner proves by a succession of investigations as new as they are ingenious, that administrative centralization was an institution of the *ancien regime*, and not a creation of the republic and the empire, as is ordinarily stated—that the administrative interference, the usurpation of judicial functions by the executive, *la garantie des fonctionnaires*, were all of them institutions of the *ancien regime*—that, under the *ancien regime*, France was of all the countries of Europe the one in which the capital had the greatest preponderance over the provinces, and the one in which men became most like one another—that it was the *ancien regime* which completed the revolutionary education of the people—that the requisitions, the forced sale of provisions and the "maximum tax," were all measures which, as well as arbitrary judicial processes, had precedents in the *ancien regime*. "The *ancien regime* furnished the Revolution with many of its forms, to which it added nothing but the atrocity of its nature."

From these considerations it would seem to follow, that the Revolution brought nothing new with the world, but De Tocqueville does not go so far; he recognizes it as an "immense" revolution, and concedes its great originality; in that it was the first political revolution that had the characteristics of a religious one, cosmopolitanism and proselytism. "All civil and political revolutions have had a country; the French Revolution had no nationality, it brought together and separated men without regard to laws, traditions, character, language, making enemies of fellow-countrymen and brothers of strangers." Of cosmopolitanism was born proselytism. The Revolution penetrated everywhere like a religion, "*par la predication et la propagande*;" and the cause of this resemblance was that the Revolution, like religion, considered "men in general" not some particular man or some particular nationality. From this cause, the Revolution took the characteristics of a religion, "a religion, without God, without worship

and without a future life, but which, nevertheless, like Islamism, has deluged the whole world with its soldiers and its apostles."

In this way De Tocqueville in one sense justifies the Revolution, and in another criticises it, but differently from the way in which either its friends or its enemies have. He justifies it in showing that it was not so much of an innovation and in consequence not so absurd, as the partisans of the past had said. It had endeavored to found a social order on pure reason, on the abstract idea of right and humanity; but even in that it had only realized what had been preparing before. It was then truly philosophical and truly historical. But on the other side De Tocqueville has awakened our anxiety as to one of the possible consequences of the Revolution, the establishment of a new absolutism, democratic or Cæsaric, utter disregard of the individual, indifference to rights, absorption of all local life by the center, and the consequent extinction of vitality in the parts; an evil whose extent De Tocqueville has perhaps exaggerated, but which, having its germ through all our history, has been propagated and aggravated without doubt to an extreme degree by the Revolution. Such is the moral suggested by M. De Tocqueville's book. His book is, however, that of a historian rather than of a moralist; he explains more than he judges. He is neither friend nor enemy, but simply a looker-on. The passion which animates him is felt at the bottom, and his impartiality is not that of indifference; he makes his heart keep silence and endeavors to communicate truths rather than precepts to us.

While France, examining into the causes of her failures, applies to the Revolution a sincere and independent criticism, Germany, on her side, proceeds with the same criticism with that cold and systematic hatred whose terrible effects we have more recently felt. Such is the character of Herr von Sybels' "History of the French Revolution," a work filled with new and curious documents, but in which cannot be found even the shadow of impartiality. He combats the French Revolution, both because it was a revolution and because it was French. He denies all its claims of good and acknowledges only its origination of evil. However, notwithstanding his attempts to blacken it, more than one confession escapes him of the utility, the justice and the benefits of the Revolution he detests. Thus, to go immediately to the

material results, which are less contestable, because the imagination has nothing to do with them, he tells us that the France of the *ancien regime* was, according to the report of trades and professions, four times less rich, and according to the report of commerce and agriculture, three times less rich than at present. As to the inequality of taxes, he estimates that the privileged classes ought to have paid 35,000,000 francs more than they did ; that the "*frais de corbee*," which weighed exclusively upon the common people, amounted to 20,000,000 francs, the militia tax to 6,000,000 ; that the duties levied directly upon the people by the proprietaries amounted to 40,000,000 francs, which, adding all these sums, gives a total of about 100,000,000 francs taken from the one to enrich the other. Added to which, according to Herr von Sybel, the budget of the *ancien regime* was larger than that of any of the governments which followed it, excepting the Committee of Public Safety, which he puts as equal to what would be to-day a budget of 24,800,000,000 francs. Add again the intolerable abuses of farming the revenue, and you can imagine what the poorer classes must have suffered from such a state of society. These facts suffice to prove how necessary a change had become. Notwithstanding his hostile disposition the author does not escape enthusiasm for those noble spirits on the celebrated night of the 4th of August. Even while repeating the *mot* of Mirabeau, who called it "an orgie," he says : "That assembly is often and wrongfully reproached with the ruin of a system impossible to sustain ; on the night of the 4th of August it accomplished forever the liberty of labor, the equality of rights, the unity of the state."

[TO BE CONTINUED.]

THE PIED PIPER OF HAMELIN.*

MOST readers of the most popular and best-known poem of all that Robert Browning has written, take the story of the Pied Piper to be a pure fiction of the author's own invention. Those who are learned in German mythology, however, know that our great master of the grotesque has only taken a story which exists in a great many forms in German literature, and filled up the spaces between the original lines from his vivid imagination. There is even a separate literature of this story, one piece of which—a thin square Latin dissertation of four sheets—lies before us. Herr Nieremberger, it seems, was studying philosophy and theology at the very orthodox Lutheran University of Wittenberg in the latter part of the seventeenth century, when his attention was called to a disquisition on the subject published by one M. Schookius, at Gröningen in 1662.* This Schookius was undoubtedly a forerunner of that terrible and evil race, the German rationalists. He scouts the whole story as a pure fiction. Herr Nieremberger, like a true orthodox German, thinks there is another side to the question, and replies much more briefly in his dissertation, quoting the authorities for the story, and giving his reasons for thinking it no fiction.

Nieremberger (like Schookius) opens his dissertation with a preface on historical truth; no unanglicized German was ever satisfied to begin anywhere except at the beginning. He then describes Hamelin and its history; traces the etymology of the name, and proceeds to quote the authorities for the story (1) those writers that give it in full detail; (2) the oldest writers that record it, and (3) the local monuments that attest its truth. Taking them in the reverse order we notice that a window in the city church contains an inscription partly effaced, but evidently re-

**Historia Hamenlesis; sive Dissertatio de Inauspicato Liberorum Hamelensium Egressu ab Nicolao Nieremberger, Wittenbergae, Anno MDCLXXVII.* [The Hamelin History, or a Dissertation on the Lamentable Departure of the children of that city . . . by Nicholas Nieremberger. Pub. at Wittenberg, 1677.]

Fabula Hamelensis; sive Disquisitio Historica qua premissa generali dissertatione de historiae veritate, ostenditur, commente rationem habere, quæ vulgo circumferatur de infausto exitu puerorum Hamelensium, etc. Ed. II. 12 m.

lating to the event. The date *Anno 1572* seems to indicate that it was erected nearly three hundred years after the event. The inscription is supplemented by pictures on other windows in the church, and by old pictures in various private and public edifices. Then a Latin inscription on the New-gate records the event as taking place 272 years before that gate was built, which therefore dates from 1556. Another Latin inscription is in the Monastery of St. Benedict.

Of the more ancient authors he quotes two German chronicles, one the Saxon chronicle (in prose) by Michael the Saxon, the other the chronicle of Hamelin coming down in 1589. Both tell the story briefly, but it is noteworthy that the second chronicler, though writing on the spot, speaks of the story as discredited by many people. Then come Latin authorities, of whom many are alleged and two quoted at some length, viz.: John Wier (*De Præstigiis Demonum*) and the old Jesuit Athanasius Kircher (*Mæsurgia Universalis*). We translate what the former says, adding [in brackets] some details from the latter:

A certain piper who had been brought to Hamelin in Brunswick for the purpose of delivering the place from rats, repaid their ingratitude by a sudden piece of rascality. On the sixth of June, A. D. 1284, a hundred and thirty children followed this "Pied Piper" (so called from his wearing clothes of many colors) through the street to a short distance outside the city, to a hill called Unter-Koppen, situated on the high-way that leads to the North, and there perished, never afterward appearing again. This is said to have happened at past seven o'clock in the morning, and a daughter of the burgomaster of marriagable age is said to have been one of those who disappeared. But the boy, who had followed part of the way with nothing on him, ran home for his clothes, and in the mean time all had disappeared through the narrow aperture which was shown me. What a bloody devil of a piper!

These facts are written on the public annals of Hamelin, and religiously preserved in the city archives; records of them are also to be found in the church books, and they are to be seen in the painted glass windows of the building. In old times also, the magistracy, in confirmation of the story, were wont to date documents (in connection with "in the year of our Lord") also "from the year of

the departure of our children !” It is usual to this day that the beat of a drum is never allowed in the street by which the children went away, not even when a bridal procession passes through it ; it has therefore obtained the name of the Bunge-lose strasse.

The old Jesuit Kircher tells the story more fully, and as one who was in so far an eye-witness that he had actually visited the town, heard the traditions and seen the monuments of the event. His Latin rolls and resounds something like Browning’s English, with a like imitation of the sounds that characterize parts of the story : “ The mischief wrought by the rats had grown to such a height that nothing, even that grew in the fields or orchards, escaped these pests. Several town meetings were held to devise means to get rid of an evil at once so ruinous and so relentless. But suddenly there appeared a stranger of prodigious stature, who offered, if they would agree to give him a specified sum, to rid them at once of every mouse in the territory. So said, so done. They promised the reward ; and the man, drawing a pipe from his garment, at once began to play, and lo ! from every corner of their houses and from every crevice of their roofs, from every hole in their floors, rushed an enormous army of rats, which followed the strange sound of the piper’s playing toward the very river. The piper girt up his clothes and waded in, and the rats followed with one accord and committed suicide by drowning. The fellow demanded his pay for carrying out his charm, but the city began to haggle about the sum they had promised. He then threatened them that unless they kept terms with him he would exact another reward and a much weightier. They only laughed at his threats, but about noon of the next day the fellow showed himself again with a terrible countenance, in the dress of a hunter, and wearing a purple cap of the strangest shape. He began to play upon a pipe far longer than the one he had use before, and at once the children of the whole town, from four years old to twelve, rushed out and followed the weird music. Outside the town there is a cave in the heart of the mountain ; into this the hunter led them, one and all. Not one of them was ever seen again, and it is a question whither they went. . . . We read in the chronicles of Transylvania that about the same time there suddenly appeared children who spoke an unknown language, and who, after settling in the country, spread their language so effectually that now no-

body speaks anything but the Saxon dialect of German in Transylvania."

Our Nierembergius argues his case against Schoock with great spirit and ingenuity, pleading that the mass of testimony forbids us to suppose the story to be simply fabulous. He himself treats it as a genuine, though miraculous, judgment of God upon the wicked burghers of an ungrateful city. Peace to his ashes and theirs.

THE strike for the eight hour day's work, threatened for years, is at last upon us in good earnest. About the lawfulness of the strike, *per se*, there can be only one mind. Workingmen have the same right of combination that other men have; the same right to refuse a bargain which they think unfair to themselves, but also the same right to accept of a bargain which they think fair, whatever others may think about it. Trades' Unions have very right of *peaceable* appeal; they may urge upon their fellows every sort of moral or logical, or illogical argument, "public spirit, necessity for united action, ultimate benefit," etc. If he refuse, they may send him to Coventry, and refuse to work in the same shop with him. But they must go no further. Every step of active and forcible persecution is a justification of the oppressive laws which once bore so heavily on their own freedom of action, and which are still unrepealed in some of our States.

As to the wisdom of the strike, there is large room for discussion, and very little of wisdom has yet been heard. How many hours of hard work are consistent with full and equal growth of body and mind? How many do the actual necessities of society demand of its members? Have we not been advancing in the production and perfection of things, at the expense of the growth of men and humanity? If the two lines of progress conflict with each other, which shall yield to the other? These are the questions which underlie the movement. No lever of the human species will look on them as unimportant. No effort has yet been made to collect the data for their solution. What we know of the social state of the Republic, even after allowance is made

for the existence of a slave claim, suggests that possibly the answers might not be those which occur to our able editors.

One ready answer to all this is that there is no presumption that our artisans will increase their leisure for any worthy and ennobling purpose; an answer which it is easy to confirm by multitudes of bad examples. The principle of the answer is that of all despotic governments, and slavery itself: "men will not use freedom aright, therefore give them none." We are bound to give them the opportunity of doing right, whether they use or abuse it; that responsibility is theirs, not ours. Nor are we to suppose that our workingmen will have no better facilities than at present to employ their leisure, supposing the movement to be successful. When so much spare time falls to the laboring classes, it will become the imperative duty of the government to give them the means of enjoying it rightly and wisely. Those great foes of low pleasures, art galleries, public libraries, parks, etc., will no longer be ornamental eccentricities, but a part of our public policy.

"But is there not a perfect harmony of interest between the two classes of employers and workmen, such as enables us to pronounce, *a priori*, that strikes are wickedly foolish? On the *human* plane there is a perfect harmony. It is the employer's interest as a man that all men should attain to equal, free and harmonious development as men. As a man he has no higher interest. But as a money-maker the harmony of his interest and theirs is by no means so perfect. They have their day's work to sell him; it is his interest to give for it just the smallest share of its net value that he can give without driving them from his service; it is their interest to get as large a share of its value as they can possibly extort. Here is "the hard pan" of primitive fact and antagonism. If money-earning be the chief end of work, and that is certainly the modern and universal conception of it, then there is neither harmony nor poetry about it.

That the world's order is so based upon a beneficent substratum, that all the great advances benefit both classes, is certain. Workingmen and employer both stand on a better footing than ever before. The workingman is especially benefited by the change, and capital takes a far less share of their joint activity than in the past. It is certain, also, that every extension of the field of ac-

tivity will help the latter still more decidedly. But withal when the individual worker makes his bargain with his single employer, every natural, selfish instinct of the two comes into conflict. Light is not born of darkness; there is no harmony on a basis of selfishness.

NEW BOOKS.

"BEDE'S CHARITY," by Hiesba Stretton. New York: Dodd & Mead, 1872.

This is a very charming little story, simple, fresh and pure in its style and decidedly profitable in its tone. Margery Bede, the heroine, tells her own tale in a natural, touching manner. She is an English country girl, brought up to the active duties of a farm-house. The whole interest of the book rests upon her, and her sweet, unselfish, lovely character. Among her natural traits, was her great appreciation of whatever was attractive or beautiful in nature. The force of circumstances carries her to London, where she narrates her trials and her experiences. Her half-brother, Stephen, is early separated from the drudgery of the farm, and sent away to be educated and to become a gentleman. This is done through the energy and unselfishness of Margery, as she had to practice self-denial in order to effect it. Stephen soon feels himself superior in learning and refinement to his father and sister, and the reader is drawn into a train of reflection, whether it be desirable by a course such as this, to lift one member of a household so much above those nearest to him in the world, as almost to compel him to look down upon them. He completes his academic course and goes to Australia to make his fortune, and returns to England after many years' absence a rich man, and a gentleman in manners and appearance. The interest of the story is here brought in the after intercourse between him and his sister. His coldness, pride and extreme selfishness seem almost unnatural, yet he pursued just the course that many thoroughly ambitious and selfish men would have done under the same circumstances. The beauty of the book consists in the loveliness of Margery's natural and religious character. It seems to belong to no school, no sect, no particular church, although educated in the Church of England, but to be the result of a simple, strong Christian faith. It is disfigured, however, by many and glaring typographical errors.

OUR ENGLISH BIBLE AND ITS ANCESTORS, Porter & Coates, Phila., is part of the literature of the Revision movement. Rev. Treadwell Walden of Indianapolis, moved doubtless by the general misunderstanding of and prejudice against the revision now in progress in England, takes up the story of the formation of our present version that his hearers and readers may be able to

judge for themselves as to whether the example of our older translators does not suggest an improvement on their work. In no country is the story of the translation of the Bible so closely bound up with the history of the Reformation as in Europe. Always excepting Ulphilas' version for the Goths in the fourth century, England has the oldest vernacular version. The Mediaeval forerunners of the English Reformation (Wiclif and Purvey) turned their reformatory activity in this direction. Tyndall's New Testament was the first tangible gift of the Continental Reformation to England; the zeal with which 15,000 copies of it were bought up, in spite of prohibition, shows how the ground was prepared for the new seed. The story of the half dozen versions which succeeded it, is the story of the conflicting leaders and statesmen of the Reformation. Our authorized version is the monument of the temporary lull in party warfare that prevailed between the establishment of the Reformation and the breaking out of the Arminian controversy, when Prelatus and Puritan were anxiously watching the learnings of their Scotch King. That it has so long remained without revision, and is now submitted to it, is not without significance; for long centuries the results of the Reformation have been accepted by the masses as ultimate and our generation is the first in which they have been popularly brought into question.

Mr. Walden tells the story with simplicity and vivacity. He does not always hit the right word, as when he speaks of Erasmus as the "founder" of the printed Greek Testament. His publishers have reproduced his lectures in a very attractive and readable shape.

THE
PENN MONTHLY.

AUGUST, 1872.

THE PRIMITIVE "PARADISE REGAINED." *

IT will generally be conceded that no body of literature is in itself so interesting, or has exerted so great an influence upon the history of the world as that which we bind up in one under the traditional name of "The New Testament." That collection of books, by at least nine different authors, is the landmark which defines the beginning of a new era of the world's history; it has taken hold of men with a power and inspired them with an enthusiasm that is without a parallel. Judged simply as literature, it must be pronounced to furnish the very grandest specimens of sublimity and pathos, vivid narrative and dramatic vivacity, that ever flowed from lip or pen, and yet it is only in modern times, and in a very timid and half-hearted way, that those who accept these writings as ethical and doctrinal authorities, have presented them in their purely literary aspect for men's admiration.†

* MAPAN ATHA. DAS BUCH VON DER ZUKUNFT DES HERRN, DES NEUEN TESTAMENTS SIEGEL. Von Johann Gottfried von Herder, Riga, 1779.

LECTURES ON THE APOCALYPSE, OR BOOK OF REVELATION OF ST. JOHN THE DIVINE. By Frederick Denison Maurice, M. A., Cambridge and London. 1861.

† Blackwall's *Sacred Classics Defended* (1727) was about the first attempt in a formal way. Christian Wolle published a Latin translation of it at Leipsic, in 1736, which exerted a large influence in Germany. Even Winer (1855) says that it "abounds in excellent remarks," and calls its author "the learned

There is some excuse for this backwardness on the part of those who held these documents to be something sacred and exceptional. The sort of literary study to which the Bible and all other books was subjected by the analytical eighteenth century, and its numerous successors in our own, did not promise much. To irreverently pull to pieces everything in heaven and earth was the self-imposed mission of that age. To reverently and hopefully enter into sympathy with the author and his book, to seek to understand his drift and his wisdom, to find what was good and excellent there, was no part of this criticism. The understanding was kept in the liveliest exercise, while all other faculties were at rest and in silence. It came to doubt everything; all the reverences and sacrednesses of life were parched up in its furnace heat; the pride of knowingness rather than of knowledge was all prevailing. Of course there were bold reactions to the other extreme—such as made Novalis say: "Where the gods are not, specters rule." After Voltaire came Cagliostro; after La Mettrie, Eckartshausen. And indeed the whole spirit of our century, everything that distinguishes it from the last, is a reaction against the shallow knowingness of the last.

Yet the spirit of the eighteenth century still lingers, notably so in those who prate most of "the spirit of the age." Especially is this the case in regard to this body of documents we speak of, and it seems to be an understood matter that there is nothing to be said about them, except now and then a literary sneer. "Criticism," we hear continually, has said thus and so, and we bow to must her decision. Now criticism, *i. e.*, the analytical operation of the understanding in the sphere of literature, can exercise but a very limited activity. It may explode some falsehoods, but it is utterly unable to establish truth. Its end is a negation; its work

Blackwall." The next was the elegant Latinist Bishop Lowth, and the German Eichhorn; but all these diminished the peculiar glory of the sacred writings by persistently applying classical tests and standards. Thus Lowth spends much time over the question whether the book of Job can be called a tragedy, and Eichhorn does his best to resolve the Apocalypse into a drama. Wereckon Herder (1774-6 and 1783) as the first who cast aside all this classical nonsense and threw himself into the spirit of this oriental literature, recognizing the fact that it must be judged by its own standards, and not by those of another and a different literature.

is the analysis of things into their elements. "Every step that has been taken in our day toward real profitable inquiry has been a step out of this method, a step toward the investigation of things as they exist. Above all in literature is this true. Here the analytical spirit of the last age displayed itself in its full power; every book was to be cut up into its elements, and whatever did not please the critic was to be cast out as worthless; nothing whatever was done in the study of a book as a whole; nothing toward the discovery of the purpose which actuated and informed it." * We are told that the Bible should be treated like other books. Other books are treated in very different ways by different people. Are we to treat the Bible as Voltaire treated Shakespeare last century, or as Gervinus treats him in this? No two methods could be more different—the one self-willed, arbitrary and irreverent, the other characterized by the humility, patience and reverence which should characterize every follower of Bacon. And yet the theologian cannot if he would secure for the Bible a treatment different from whatever is the current method in the field of literature. "When all books are merely cut up into their elements, the Bible then will be dealt with in the same manner. When other books, and the whole series of books which constitute the literature of a nation, are contemplated in reference to their principle and idea, it is utterly impossible but that it should be studied in the same manner." † If the best and wisest method of literary study, that which is constructive, positive, sympathetic and reverent, be applied to the Bible, we shall be under no necessity to deprecate the consequences. When it is agreed that the Gospels and the Epistles are to be treated with as much reverence as Shakespeare's plays now receive at the hands of our scientific critics, we shall rejoice to see our literary critics busy upon them. At present, the last ray and remnant of their re-

* F. D. Maurice, in *The Kingdom of Christ* page 399 (Am. Ed.) Cf. the dictum of Goethe, which expresses his sense of the difference of the two methods in another sphere of study: "What avails all intercourse with nature, if by the analytical method we merely occupy ourselves with individual material parts, and do not feel the breath of the spirit which prescribes to every part its direction, and orders or sanctions every deviation by means of an inherent law." Cf. Kingsley's *Later Miscellanies*, page 7.

† F. D. Maurice, p 401.

spect for these older documents, when they have any, is displayed in letting them severely alone. They treat them as a body of writings of purely professional interest, and falling no more within the field of literature than would Vega's Logarithmic Tables, or Wood's *Materia Medica*.

The book that occupies the last place in the collection which we call the New Testament may fairly be regarded as the worst treated of the whole series. Not that it has been neglected or passed by so far as commentaries are concerned. On the contrary, it has been fairly burdened and overwhelmed by the mass of exegetical literature that has been heaped upon it, if indeed we can call the trash literature. Never was such a jail delivery of folly and fanaticism; never such a babel of expounders and exegetes. The Apocalyptic expositor has become a proverb for fantastic notions and preposterous conclusions, and stands vividly before the popular imagination with a newspaper clutched in one hand, and his favorite book in the other, trying to read the two into harmony. It is even held to be a matter much to the credit of John Calvin, that although he wrote commentaries upon all other books of Scripture, he passed by this one. Luther at one time rejected it from the Canon, and never cordially admitted its right to a place there. He omitted it from the books to which he wrote his "Golden Prefaces," and in one of his commentaries rebukes those who spend their time in expounding it to the people, with as little practical fruit as attended the labors of the preachers of a by-gone day who treated their audiences to disquisitions out of Aristotle. Goethe chimes in with an unfavorable opinion of the book itself. On the whole the general drift of thought has been unjust to this grand epic poem, and its expositors are partly to blame for the fact. Learned and simple alike, unless fascinated by some special "prophetic" theory, shrink from its study. A Scotch elder, on learning from his minister that he proposed a series of lectures on Revelation, cautioned him: "I've nae objection to ye taking a quiet trot through the seven churches, but for on'y sake drive *canny* among the seals and trumpets."

The current theory regards the book as a prophetic history of the church, from its commencement to its consummation. The only differences of opinion are as to the point in the Revelation which corresponds to our own time, and as to the historical mean-

ing of this or that symbol employed by its author. Romanists and Protestants of course take diametrically opposite views, and hurl seals and trumpets at each other's heads with the greatest liberality. Swedenborg took a *via media*, and dealt out its horrors and denunciations to both parties.*

But over against this theory stands another and quite a different one, which is rapidly taking its place among scholars of any real width of learning. This other theory may be said to have been first indicated by Hugo Grotius (1644), to have been very imperfectly developed by two divines of the Grotian school in the English Church—Whitby and Hammond—and to have taken its final shape at the hands of a French Protestant minister, F. Abauzit (1730), (a friend of Voltaire). From France it passed into Germany, and was adopted by Eichhorn, Johannsen, Hagen and others, who presented it in a stiff, mechanical way. Herder, who united the learning of a true scholar to the imagination of a true poet, anticipated them in his *Maran Atha*, in which much that is fanciful is mixed up with the results of real insight and scholarship. From Germany this view came back to England with Coleridge, who presents it in several places in his works. In the school of Coleridge, the Platonist Broad Churchmen, as might be expected, the same view is generally entertained. From Coleridge's greatest disciple, the late Frederick Denison Maurice, we have the fullest and most thoughtful exposition of the true meaning of the book ever given to the public.

This scholarly view of the apocalypse is, "that it narrates in the broad and inclusive form of the old prophets the successive struggles and final triumph of Christianity over the Judaism and Paganism of the then Roman Empire, typified in the fall of Rome, and in the destruction of the Old and the symbolical descent of the New

*The current Protestant theory took its shape, after some century of chaos, at the hands of Joseph Mede, in Commonwealth times. Since his time the chief labor has been to modify his results and make similar applications to events which have occurred since his day. The millenarian wing of his followers was started by poor, crazy Whiston, and it again has been elaborated by Rev. C. B. Elliott in his *Horae Apocalypticæ*, a monument of misapplied industry and ingenuity, upon which "Prophet" Cumming and others have freely drawn. Edward Irving, earlier in our century, wasted much of the energy of his great intellect in the same field.

Jerusalem." * It is especially needful to emphasize its relation to the Hebrew prophets, which is two-fold :

1. The author draws upon the prophetic writings of the Old Testament, and especially upon Ezekiel and Zechariah. Like Milton, he uses his predecessors continually, but never in a mechanical way. What is taken is always made his own in the taking, is fused again by his own prophetic fire, remoulded by his own poetic touch. Compare for an instant the vision of "the Son of Man" (Apoc. i. 12-20) with the vision of the Glory of the Lord (Ezek. ii. 26—iii. 10) the four living creatures (Apoc. iv. 6-9) with the four-fold living creatures seen by Ezekiel (i. 5-14.) ; the sealing of the tribes (Apoc. vii. 4-8.) with the marking of the faithful by the six scribes (Ezek. ix. 2-6) ; the judgment upon Jerusalem (Apoc. xviii.) with the judgment upon Tyre (Ezek. xxvi. xxvii.). These are a few of the more striking passages in which this prophet of the new covenant borrows the imagery of his brethren of the old covenant, yet borrows without plagiarism. A word as to the origin and character of this imagery. It is not purely Jewish, being mostly drawn from the later prophets, who had come into close contact with the ideas and the imagination of the nations of the farther East. There is a boldness of embodiment in it which is wanting in the purely Hebrew prophets of the period of Independence. Isaiah sees no beasts, nor angels, nor any monsters of any sort. † His imagery is drawn from the fields, and the vineyards, the stables and the stalls, the cities and waste-places that lay within his mental horizon, and furnished his imagination with materials. But in the prophecies of Zechariah, Daniel and Ezekiel we possess the work of men who had looked upon the carved palaces of the Euphrates Valley, and had heard the Magi dilate upon the angels of Zoroaster, the Divine Word, the Light uncreated, the Time without bounds. This fact is of the first importance, in understanding and interpreting their visions and those of the Apocalypse.

(2.) The prophet of the Apocalypse was a prophet in the strictest Hebrew sense of the word. He was not a mere predictor of

* S. T. C. VI. 164. (Am. Ed.)

† Is not this fact a sufficient refutation of the theory that represents the last chapters of Isaiah (XL—LXVI) as written after the captivity.

the future; he was one who had a living, practical message for his own generation. The Hebrew prophet might be a foreteller, or he might (like Hosea) utter no predictions whatever. That was no essential part of his work. His mission was to discern the moral law and the divine order that underlay this or that social and historical fact. His gift was to see "Him who is invisible," and to speak to his own generation in words which would make them feel the reality of the unseen powers of light, truth and righteousness, and lead them to act on that conviction. His work was that of an ethical and political teacher, who regarded ethics and politics as having a theological ground.* His knowledge of the law that underlay facts might lead him to a foresight of the future, and he might embody that foresight in threats and warnings. But he was essentially a forth-teller, not a fore-teller; he was concerned about all the burning questions and live issues of his times; he had a message that concerned the present life of his nation. Now all this the author of the Apocalypse was; his book is a statement of the actual condition of the Roman empire, of the spiritual conflicts that were waging within its borders, of the sure and speedy issue of those conflicts. To warn us that it is his own time he is dealing with, and not a vast indefinite future, he puts in the very front of his book the caution, it is concerned with "the things that must come to pass speedily" (ἐν ταχέϊ). Everything in the book indicates how close he felt the connection to be between its contents and the lives of his fellow-Christians. The Apocalypse is not the only prophecy of these events that we have in the New Testament. It is, indeed, largely an expansion of prophecies of Christ, which are recorded in the xxiv. chapter of Matthew and the xvii. of Luke. Here again we have the caution given with solemn emphasis that the prophecy is for those who heard those words of warning spoken: "Verily I say unto you, this generation shall not pass away until all these things be fulfilled." But here again, as in the Apocalypse, the caution is willfully set aside by commentators, and the words made to refer to a

* Mr. (now Sir) Edward Strachey has illustrated this very finely in his *Hebrew Politics in the Times of Sargon and Sennacherib*. The book is a study of the prophecies of Isaiah from the point of view of an English politician, aided by the political writings of Niebuhr, and the speeches and measures of Gladstone and other modern statesmen. The work is thoroughly well done.

final judgment yet to come upon the whole earth. The secret of this kind of exposition is to be found in the matter-of-fact, mechanical intellects of its authors.* The bold poetical clothing in which alone these predictions could be worthily expressed, they cannot for their lives think of applying to the actual events of Jewish history *circ. A. D. 70*. They have not the prophet's eye to see the invisible; therefore, they stumble at the prophet's words.

Under all these prophecies lies one fundamental conception of the moral order of the world's history. The New Testament represents the course of history as divided into ages (*αιῶνες, secula*), which begin, culminate, and are consummated with divine judgments, *i. e.*, great moral conflicts which end with the establishment of good, and the overthrow and confusion of evil and falsehood. The time of overthrow, what we call the period of transition, the crisis of history, is the subject of the Apocalypse. Christ in His prophecies presents the consummation of the age in its relations to the Hebrew nation and the Jewish religion alone; His last prophet takes up the same topic, and shows us the overthrow first of Judaism, then of Paganism—the two great representatives of the world's disorders and anarchies—and the establishment of the Divine order of the kingdom of God in Christendom. We have not space to explain the whole of this wonderful poem, but will briefly glance at its opening chapters, penetrating as far as those seals and trumpets through which the old Scotchman wished his minister to "drive cannily."

The opening chapters of the Apocalypse present to us the elements of the new order in their contrast to the surrounding disorder and their inward and outward struggle with it. First comes the vision of the Son of Man as the sustainer of the Churches' life; then the messages to them, rebuking what was evil and praising what was excellent in them. Upon the life of these little companies of Christians, the future of the great world-drama depended. Insignificant as they were, they were the seed-corn of a great future. The world's history hung upon them, and they

* It is not too much to say that we have not had three English expositors to whom prose was not more intelligible than poetry, and who did not think that they were making a passage clear when they translated its poetry into prose. Thus Cowles, who is not far wrong in his general conception, fairly murders the Apocalypse by his bathos.

deserve to stand here through their seven representatives, the churches of Lesser Asia, in the opening of the great epic of the world's judgment. Their existence is the key to the mercy of the judgment; they were the seed of hope, the promise of a new age.

Then comes the opening of the spiritual heavens to the exile's sight, and the vision of the One whose throne is awful from excess of light. Around it are gathered the manifold forms of life that symbolized the great types of civilization and power—the calf of Egypt, the lion of Babylon, the man of Greece and the eagle of Rome. The prophet's eye sees and the prophet's ear hears them unite in worship and thanksgiving to the One. The idolatries were not mere falsehood; they were perversions of the truth and had a counterpart in the life of heaven. Around the throne are seats of judgment and authority for four and twenty elders, as of the old Hebrew national order. That also, then, was an image of heavenly truth; the governments and the justice of earth have their pattern in heaven. Nor is the throne passive; thunders and lightnings and voices go forth from it to wage war upon all disorder, and seven lamps of perfect light shed their light upon the universe. A sea of glass lies spread before it to image the glory of the One, representing the creatures He has formed to bear His image. This was the throne of life and light, of testimony and terror, of justice and order, from which the world's judgment was to be pronounced. The One that sat thereon held in his right hand a scroll that expressed His will and purpose, but sealed from all knowledge but His own. Who shall open this book that men's hearts cry out for? The prophet found his answer in one who perfectly united the Divine self-sacrifice and patience with the Divine power, a slain lamb with the seven horns of power and the seven eyes of wisdom, seen in the midst of the throne, the center of all its light and its judgments, confessed as such by all the forms of life and of order that gathered around it.

As the first four seals are broken, there go forth emblems of the great forces visibly at work upon the earth—conquest, civil war, trade and death. Even these are arrows from this quiver, not less such because hell follows the last of the four—the moral recklessness and despair that attend great disasters. The fifth seal is answered by a great cry from all the suffering and the faithfu

souls that cry out for God's kingdom, and their cry is owned as a witness for God. The sixth depicts a time of sore mental confusion and distress; all things in heaven and earth, in the religious and secular conceptions and beliefs of men, are shaken or darkened; the tyrants and their slaves equally cry out in terror of a Divine wrath. All this grand series of pictures manifestly portrays in Hebraic poetical forms the disorders of the empire.

Ere the seventh seal is opened, we have a two-fold glimpse of Divine providence. Two great classes of angels are presented, the one administering the judgments of condemnation, the other sealing and defending the faithful. The former wait upon the latter, for the earth's judgment is to be her renovation; and the elect, mystically represented by the twelve tribes, must be secured. Who are they? the just and the valiant men who have not held their own lives dear, who have battled and suffered, who have been victorious through all. The breaking of the seventh seal, instead of closing with a single act expands into seven trumpets in the hands of seven angels, like those in the hands of the seven priests, when Joshua encompassed Jericho. Is it again a city that is to fall? Yes, the city of God, which men have made the theater of all malignant passions and atrocities, and which the avenging hosts are encompassing. But the first judgments upon her are judgments upon the whole earth; her history is bound up with it all; she shares with them in the plagues as of a spiritual Egypt, the overthrow of great commercial emporiums, the inward poisoning of national life, the inward darkness and confusion of mind, as trumpet after trumpet sounds. But the last three gather more closely around the doomed city: a star, a body set in the intellectual firmament to give light, falls to earth to increase its darkness; a crust of fair hypocrisy breaks, and a yawning gulf opens at men's feet, and floods the earth with the blackness of its smoke; scorpion-like locusts (as in the vision of Joel), superstitions, speculations and fancies swarm out of it, not to attack the grass and herbage of the world, but unbelieving men, stinging them till they cry out for death. Their restless character, their golden phantasms, their reflection of man's face and wants, their feminine element of timidity, their lion-like cruelty, are all depicted. They were all in one service, that of the Destroyer. The state of the intellectual world in the East at this time, swarm-

ing as it did with notions, heresies, theories, to which Judaism greatly contributed, fully justifies the picture. Then with the sixth trumpet the national boundary is swept away, and the destroying armies of the Gentile Babel loosed upon Israel. The destructive force of a cruel, despotic, life-destroying civilization is loosed upon the earth, with its two-fold power of head and tail, of intellect and animal force. But men have learnt nothing, have only been stupefied by the manifold woes, plagues and apostasies; have not even learnt that these are trumpets of a coming judgment.

Then comes a solemn proclamation of the near approach of the destruction of the city, around which the trumpets are sounding. A mighty angel comes down to earth to swear that there shall be no longer delay; in his hand he holds the book of the nation's judgment—the book of the unveiling; his feet are on the land and in the sea, for the whole earth is concerned in his message. Then the prophet (like Ezekiel) is called upon to eat that roll of judgment, to take it into his inmost being with all its sweetness and bitterness, to learn its message by heart and not by rote.

With this closes the first great division of the book, and here we shall end our very imperfect elucidation of its symbols, referring the reader to Professor Maurice's *Lectures* for the rest. His book is as truly a work of genius as any in our theology, and we agree with Chas. Kingley's remark, that it might be taken in preference to anything else that he has written as a specimen of his great powers of insight and of expression. Should it obtain the circulation and the study that it deserves, it will have the effect of restoring the author of the Apocalypse to his true place as the last of the Hebrew prophets and perhaps the greatest, and wresting the book from the hands of those who have made it the subject of mere misapplied ingenuity.

We have said nothing as yet of the age and the authorship of the poem. The passage, "there are seven Kings; the five are fallen, the one is, the other is not yet come: and when he shall come, he must continue a short space" (xvii. 10), manifestly points to the transition period between the brief reign of Galba, and the accession of Otho as that in which the book was written. The five who preceded Galba are Augustus, Tiberius, Caligula, Claudius and Nero; "the beast that was and is not, even he is the eighth, and is of the seven and goeth into perdition" points for-

ward to Vitellius in whom the expectation so widely diffused through the East that Nero would return, received a sort of fulfillment. The tyranny which had seemed to die with Nero, was utterly restored in him, as a tyranny of the most beastly sort. "The ten kings which have received no power as yet" is a glance at the commanders of the legions in the provinces, and of the influence they were to exert upon the fortunes of the Empire, of their continual struggle for the purple. The whole political horizon is displayed us under these symbols with the accuracy of a Tacitus, enabling us to fix the date at A. D. 68, or two years before the destruction of Jerusalem by Titus.

Far more difficult is it to fix on the author of the book. The traditional view which takes the Apostle John as such is very widely contested. Some German writers assert that he wrote the book, in order to prove that he did not write the fourth Gospel. Many of the orthodox theologians, in order to maintain the Johannine authorship of the Gospel, deny that he wrote the Apocalypse, and fall back on the authority of Eusebius, a church historian of the fourth century. That author found in Papias, an author of the second century, a mention of John the Presbyter, or the elder. Connecting this reference with the fact that two tombs of John were still pointed out at Ephesus, he hazarded the conjecture that this other John, not the Apostle, was the author of the Apocalypse. What he quotes from Papias is commonly construed as giving to the second of the two the title of John the Presbyter, as contrasted with John the Apostle, but it is possible that he uses the term as we use "*Sr.*" to distinguished the Apostle from a younger John.

The striking difference in style between the Apocalypse and the fourth Gospel is very patent to any reader of the original Greek. Even in the second century Dionysius of Alexandria pointed it out. He says: The Evangelist nowhere records his own name, nor proclaims himself, either in the Gospel or the Epistle but the author of the Apocalypse puts himself forward at once in the commencement of his work. One can furthermore prove the difference of expression in the Gospel and the Epistle as compared with the Revelation. For the former are not only accurately written as regards the Greek language, but also most erudite in their expressions, their reasoning, and their

arrangement of matter. It would be hard to find a barbarous word, or a solecism, or an expression for which there is no authority in them. For their author was doubly gifted in point of intellect by the Lord, both as to knowledge and as to expression. That this other had seen a revelation and had received knowledge and the gift of prophecy, I will not deny. But I see that his dialect and manner of speech are not accurately Greek; and also that he uses barbarous idioms and sometimes even solecisms.

. . . I find evidence from the style of the two and the form of their expressions that they are not the same person. Both from the order of thoughts and that of the words it will be supposed probable that they were different. The Gospel and the Epistle agree with each other in general, and especially in the words with which they begin. . . . He who reads them with attention will find that they speak much about life, and concerning light, the turning from darkness, steadfastness in the truth, grace, joy, the body and blood of the Lord, the love of God toward us, the commandment for us to love each other, the judgment, the remission of sins, the keeping all the commandments, the condemnation of the world, of the devil, of antichrist, the promise of the Holy Spirit, the adoption by God, the faith by which alone we obtain anything; the Father and the Son everywhere. And in fine every characteristic shows us that the Gospel and the Epistle have the same complexion. Beside these the Apocalypse is utterly different and strange, being, so to speak, neither at touching distance, nor neighboring, nor at all near, nor having anything in common with them."

So far old Dionysius, whose clear sharp criticism shows that the generations that collected the New Testament into one had their eyes open. And yet we plead for the opposite verdict—that the John of the Gospel and the Epistle is also the John of the Apocalypse. We concede all the alleged difference, and do not claim (as Bunsen does) that the difference was caused by lapse of years between the composition of the books, and that the Gospel and Epistle are the fruits of a wider and more accurate culture acquired in the meantime. They may have been written within a year of each other, for aught we care.

If, as we now suppose, the two books were written by the same man, they were manifestly written in very different states

of mind. The Evangelist was engaged in the work of a historian, recalling, selecting, arranging and comparing. Whether he wrote by Divine aid, or unassisted, all the human faculties of the historian were at work. But the Apocalypse was wrapt in vision; he had passed into the semi-ecstatic state of the seer. Whatever degree of objective truth we may ascribe to his visions, there can be no doubt that he was in no ordinary state of mental exaltation. Now ecstasy is as well ascertained a mental state, as is alcoholic intoxication; its literature is very considerable in extent and interest, embracing the names of Birgitta, Catherine of Genoa, Angela of Foligni, Boehme, Engelbrecht, Swedenborg, and a host of others. Whether it is in any case associated with special spiritual insight, is a question. The New Testament seems to claim that it is, in the specific cases of Stephen and Peter (in Acts) and Paul (2. Cor.) Now one feature of ecstasy is that images and conceptions which struck the subject of it with especial force in his ordinary state of mind, reappear now in the form of visions. They are objectivized in a strange and extraordinary way. Thus Swedenborg's rational theology projects itself before him into a spiritual world, in which all the angels speak his own crabbed Latin, and all the gardens are stiffly laid out in his favorite Dutch fashion. Who believes that when the Swedish seer tells us "I saw an angel come down from heaven with a fir-tree growing out of his back,"* he is giving us anything but a piece of the mental furniture of his own Swedish brain?

Apply the test to the Apocalypse. What are the peculiar conceptions of the Gospel which reappear in the Apocalypse? We shall give a few that Dr. Sears has pointed out in the *Monthly Religious Magazine* (January, 1870), but we have no doubt that the list could be greatly extended. Only John, of all the New Testament writers, notes the quenching of thirst as one of the points in which water is an emblem of spiritual things; the passages in the Gospel are numerous. In the Apocalypse we read: "I will give unto him that is athirst of the fountain of the water of life freely;" "He shall lead them to fountains of living water;" etc. Only John speaks of Christ under the symbol of a lamb. In the Apocalypse he speaks of "the wrath of the Lamb," and

*We quote from memory.

sees "a lamb as it were slain in the midst of the throne." Only John notes the fact that Christ's side was pierced by the spear of the Roman soldier; the Epistle alludes to it. In the Apocalypse: "They shall look upon Him whom they have pierced and mourn." Only John designates Christ as the Logos or Word of God; the name is repeated in the Apocalypse. Only John quotes the Baptist as calling the Church the Bride; the Apocalypse gives her the same name. Do not these instances show that the thoughts of the Gospel are reproduced in another form and connection in the Apocalypse; that one mind lies behind both.

There is another curious and (in this connection) valuable fact ascertained in regard to the state of ecstasy. There is a very decided tendency to return to the vernacular language and idiom of the subject. Scotchmen, for instance, who have spoken "book English" for twenty years, will relapse into "the Doric" as they are "wearin' awa to the land o' the leal." Readers of Macdonald's *Robert Falconer* will remember a case in point. Another case we may very possibly have in the Apocalypse. John, the seer, speaks no longer the scholarly Greek that he has acquired by years of experience among Hellenistic Jews and the disciples of Philo, at Ephesus and elsewhere. His mind flashes back to the rude, imperfect, half-barbarous Greek of his childhood and its home in Galilee—the speech of fishermen and carpenters. But what a grand poem he has given us in that broken speech; what grand music he has blown through those rustic pipes! Let Dionysius, sitting almost under the shadow of the great library, and amid the grammarians who almost alone ply the stylus there, find fault with his solecisms if he choose; the world has forgotten them and Dionysius.

WESTMINSTER ABBEY.

IT is not of architecture that we would treat in this article. We shall not attempt either a descriptive or an historical sketch. "In Westminster Abbey," said Horace Walpole, "one thinks not of the building; the religion of the place makes the first impression." "When I am in a serious mood," wrote Addison in the *Spectator*,

"I very often walk by myself in Westminster Abbey, where the gloominess of the place, and the use to which it is applied, with the solemnity of the building, and the condition of the people who lie in it, are apt to fill the mind with a kind of melancholy, or rather thoughtfulness that is not disagreeable." In some such spirit as this would we contemplate the venerable pile; by no means unimpressed by lofty nave and clustered column and glowing window, we would yield ourselves rather to the influence of the rich and sacred memories of the place, and through the shadowy vista, more grand and awful than any "long-drawn aisle and fretted vault," we would turn our thoughts back upon the generations who have known and loved and now lie buried within these walls.

On the twenty-eighth of December, 1865, being the feast of the Holy Innocents, and just eight hundred years since the dedication of the Abbey by Edward the Confessor, the dean and chapter observed the event by special services and by the celebration of the Communion. Dean Stanley, the faithful historian of the Abbey, preached an appropriate sermon from St. John x. 21, 22: "And it was at Jerusalem, the feast of the dedication, and it was winter. And Jesus walked in the temple, in Solomon's porch." The history of the edifice during these eight centuries would almost be an history of England. A long succession of kings and queens have been crowned here, from the Saxon Harold in 1066 to Victoria in 1838. Within these portals also have passed in mournful procession the remains of seventeen kings, from the Confessor to the second George, and ten of their queens.* Poets lie buried here, from Geoffrey Chaucer, "the morning star" of English song, to him of whom it was prettily said a few years ago, that a letter posted in any part of the world, addressed to the author of the "Pleasures of Hope," would be sure to find Thomas Campbell. Statesmen, also, and orators, divines, scholars, artists and warriors, almost without number, have found a last resting place within these hallowed precincts, while many who sleep elsewhere are here

*Of those Kings who were not buried in the Abbey, William Rufus lies in Winchester Cathedral, John in Worcester, Edward II. in Gloucester, and Edward the Black Prince, a king in all but fact, in Canterbury. The burial place of the House of Hanover since the time of George II. has been Windsor, where lie buried also Edward IV. Henry VII. Henry VIII. and Charles I.

commemorated by bust or tablet, in order that their names may not be missing in the long roll of England's worthies, which meets the eyes of those who in this age frequent the minster, and which shall perpetuate the distinguished fame of those great men through centuries yet to come.

It would be impossible to give expression to the thoughts which crowd upon the mind as one lingers amid these mementoes of departed greatness, in language more fitting and more beautiful than that of Addison in the paper (No. 26), in the *Spectator*, from which we have already quoted. Thus he wrote :

"When I look upon the tombs of the great, every emotion of envy dies in me ; when I read the epitaphs of the beautiful, every inordinate desire goes out ; when I meet with the grief of parents upon a tomb-stone, my heart melts with compassion ; when I see the tomb of the parents themselves, I consider the vanity of grieving for those whom we must quickly follow. When I see kings lying by those who deposed them, when I consider rival wits placed side by side, or the holy men that divided the world with their contests and disputes, I reflect with sorrow and astonishment on the little competitions, factions and debates of mankind. * When I read the several dates of the tombs, of some that died yesterday, and some six hundred years ago, I consider that great day when we shall all of us be contemporaries, and make our appearance together."

*As instances of those who, rivals in life, now sleep in death together in the Abbey, Mary Stuart and Elizabeth Tudor may be mentioned. The graves of Fox and Pitt are almost contiguous, and this suggested the lines of Sir Walter Scott, in *Marmion* :

"Drop upon Fox's grave the tear,
'Twill trickle to his rival's bier.
O'er Pitt's the mournful requiem sound,
And Fox's shall the notes rebound.
The solemn echo seems to cry—
Here let their discord with them die."

Macaulay, in his essay upon Warren Hastings, whose bust is in the Abbey, but who was buried at Daylesford, wrote in a similar vein: "In that Temple of silence and reconciliation, where the enmities of twenty generations lie buried, in the great Abbey which has during many ages afforded a quiet resting place to those whose minds and bodies have been shattered by the contentions of the Great Hall, the dust of the illustrious accused should have mingled with the dust of his illustrious accusers."

These aisles in which Addison delighted to linger, in his life time, and which his pensive meditations have adorned with fresh and ever living grace and tenderness, have been made sacred for nearly a century and a half by the presence of his dust. His funeral and his tomb were thus described by one who himself now lies beneath the same marbled roof. Macaulay has told us, in his well known essay, how "his body lay in state in the Jerusalem Chamber,* and was borne thence to the Abbey at dead of night. The choir sang a funeral hymn. Bishop Atterbury,† one of those Tories who had loved and honored the most accomplished of the Whigs, met the corpse, and led the procession by torchlight round the shrine of Saint Edward and the graves of the Plantagenets to the Chapel of Henry the Seventh. On the north side of that Chapel, in the vault of the house of Albermarle, the coffin of Addison lies next to the coffin of Montague. * * * * *

It is strange that neither his opulent and noble widow, nor any of his powerful and attached friends, should have thought of placing even a simple tablet, inscribed with his name, on the walls of the Abbey. It was not till three generations had laughed and wept over his pages that the omission was supplied by the public veneration. At length, in our own time, his image, skillfully graven, appeared in Poet's Corner. It represents him as we can conceive him, clad in his dressing gown and freed from his wig, stepping from his parlor in Chelsea into his trim little garden, with the account of the Everlasting Club, or the Loves of Hilpa and Shallum, just finished for the next day's *Spectator*, in his hand."

It will be in harmony with our present purpose to transcribe another sketch of Addison's funeral and grave; it is from the pen of Tickell, and forms part of that eulogy of which Macaulay says: "It would do honor to the greatest name in our literature, and unites the energy and magnificence of Dryden to the tenderness and purity of Cowper."

*In the Jerusalem Chamber the saintly Edward breathed his last, and, four centuries later, Henry IV. Here Congreve's remains also lay in state, for the magnificent funeral which awaited them.

†Atterbury was Dean of Westminster as well as Bishop of Rochester. When dying in exile, it was his earnest wish that he might walk once more the aisles of his beloved Abbey. His body was brought hither and deposited in a spot previously selected by himself.

"Can I forget the dismal night that gave
 My soul's best part forever to the grave?
 How silent did his old companions tread,
 By midnight lamps, the mansions of the dead,
 Through breathing statues, then unheeded things,
 Through rows of warriors, and through walks of kings!
 What awe did the slow, solemn knell inspire,
 The pealing organ, and the pausing choir;
 The duties by the lawn-rob'd prelate pay'd;
 And the last words that dust to dust convey'd!
 While speechless o'er the closing grave we bend,
 Accept these lines, thou dear departed friend.

"Oft let me range the gloomy aisles alone,
 Sad luxury! to vulgar minds unknown,
 Along the walls where speaking marbles show
 What worthies form the hallow'd mould below;
 Proud names, who once the reins of empire held;
 In arms who triumphed; or in arts excell'd;
 Chiefs, grac'd with scars, and prodigal of blood;
 Stern patriots, who for sacred freedom stood;
 Just men, by whom impartial laws were given;
 And saints who taught and led the way to heav'n;
 Ne'er to these chambers, where the mighty rest.
 Since their foundation, came a nobler guest;
 Nor e'er was to the bowers of bliss convey'd,
 A fairer spirit or more welcome shade."

We have referred to Macaulay's companionship in death with Addison. On the ninth of January, 1860, his body was interred in the Abbey, and in the place where surely every reader of his essays would surely have chosen to lay it, under the shadow of the statue so well described in the quotation given above. A few days after the funeral the following verses, in the manner of Tennyson, and not unworthy of his muse, appeared in the columns of *Punch*:

"Among the men whose words and deeds
 He best has taught our time to prize;
 Macaulay's honored coffin lies,
 'Mid hush of jarring cliques and creeds.

A shadow falls upon his grave
 When morning lights the eastern pane!
 And one, when sunset splendors rain
 Through the west window of the nave:

That by *his* recent marble thrown,
 Who sang of Nelson and the North,
 And "England's Mariners" rang forth
 In music like a trumpet-tone.

This, by his earlier statue flung,
 Who, in the lettered reign of Anne
 Stands out, serenest type of man,
 Best wielder of our English tongue—

Addison, Campbell—such the guards
 At our Macaulay's head and feet;
 And what companionship more meet—
 Of Essayists and Lyric bards—

For him, whose almost boyish breath
 The battle-ballads clarion blew,
 And thence heroic war-notes drew,
 To breathe a soul through ribs of death—

When the Armada's march he sang,
 Along the guarded English steep,
 While leaping watch-fires lit the deep,
 And village-bells defiance rang?

For him, whose later essays taught
 To narrative fresh arts of grace:
 Gave to old truths a novel face,
 And new to crystal-clearness wrought?

If with the genial English life
 That in Sir Roger charms the mind,
 Drawing us closer to our kind,
 His brilliant pages were not rife,

Yet let us own the Art that threw
 Concentred light on giant men;
 Made Clive and Hastings breathe again,
 And Laud and Strafford strive anew.

Fitly his resting place is given
 With these great dead he loved so well.
 Stand on his grave, and you may tell
 The chief stars of our English heaven.

From Chaucer's glad May-morning beam,
 To Spenser's planet rays that warm
 Cold Allegory with a charm
 Of life, seld given to Fancy's dream—

And Camden's steady light, that falls
In each dim nook of England's past
Now on some worn inscription cast,
Now on grey tower or minster walls—

And Johnson's, Beaumont's changing stars,
One moment glad as Hesper's glow
With light of mirth—to tragic woe,
Shifting, the next, like Blood-red Mars—

And all the galaxy that fused
Their lesser splendors into one
When William ceased and Anne begun,
And state-craft writer-craft abused.

Who knew and treasured of all these
What was worth treasuring, more than he
Who to their silent company
Has last gone down, from life and ease?

Yet love and skill of letters give
But half his claim to take his state
In our Valhalla, with the great,
Whose names in lettered memories live—

With our historic -worthies, too,
He shared state-life; their measure gauged
With rule, where strife of party raged,
Perchance not always just or true;

Yet, granting error, and an eye
Too prone to wink excuse for friends,
Too sharp for flaw in means or ends
Of those whose camps o'erthwart him lie.

Who shall deny his pen has cast
New life in all wherewith it deals;
That light from his bright pages steals,
Between the clouds that wreath the past?

Who shall gainsay his right to sleep
With those whom England honors most:
Whom, while they live, we loudest boast,
Whom, when they die, we truest weep?

Another modern writer, alas, also numbered with the dead, has laid his tribute on the graves of Addison and Macaulay. Thackeray, in one of his well-remembered lectures, delivered on both sides of the Atlantic, thus spoke:

"It is as a Tatler of small talk and a Spectator of mankind that we cherish and love him, and owe as much pleasure to him as to any human being that ever wrote. He came in that artificial age, and began to speak with his noble, natural voice. He came, the gentle satirist who hit no unfair blow, the kind judge who castigated only in smiling.

"The famous article in the *Edinburgh Review* may be cited as a magnificent statue of the great writer and moralist of the last age, raised by the love and the marvelous skill and genius of one of the most illustrious artists of our own."

And now Thackeray's epitaph has been written, and his bust has found a niche in Poet's Corner. A critic has well said of him:

"The highest, purest novelist since Fielding; he combined Addison's love of virtue with Johnson's hatred of cant; Horace Walpole's lynx eye for the mean and ridiculous, with the gentleness and mild charity for mankind as a whole of Goldsmith. *Non omnis mortuus est.* He will be remembered in his succession with these men for ages to come, as long as the hymn of praise rises in the old Abbey of Westminster, and wherever the English tongue is native to men from the banks of the Ganges to those of the Mississippi."

Addison, Macaulay, Thackeray! already, in a sense, they are "contemporaries." The dust of two of them lies mingled in one Abbey tomb;* in their personality, rounded, complete and vital, they all stand side by side on the pages of literature, and in the appreciative recollection of their fellow-men. Of each of them it may be said, as of Sir Walter Scott, on the occasion of his death, by Sir Egerton Brydges, "the glory dies not, and the grief is past." Of each of them, and of many another whose name and fame are inscribed on the walls of aisle and transept, in Westminster Abbey, it may be sung with a good degree of appropriateness:

"Back to the living hath he turned him,
And all of death hath passed away;
The age that thought him dead and mourned him,
Itself now lives but in his lay."

HAMILTON A. HILL.

*Thackeray lies buried in Kensal Green Cemetery.

EVOLUTION AND ITS CONSEQUENCES.

6. *On the Origin of Intelligence.*

LEAVING this part of the subject, we approach one of higher interest, viz. : The effects of the metaphysical or mental acquirements of animals on their exertions in effort and use. The growth of the mind in animals has, no doubt, followed the same laws obeyed by that of man ; the difference being that the lower forms have remained permanently fixed in stages early passed by the lord of living beings ; the foundation qualities from which all the phenomena of intellect may be derived, are the powers of Retentiveness (memory) and of perceptions of resemblance and difference. These traits are well known to be possessed by many animals, and, perhaps, in some degree by all. Their possession will be modified by the power of exercising *attention*, which, in its turn, will depend on the sensitiveness of the animal to impressions—in other words, the ease with which consciousness may be aroused.

The origin of the disposition to take food will be the rudiment of all that appears as *will* in higher animals, and which, though supposed to guide, is the creature of so many *stimuli*. This origin is supposed by metaphysicians to be the result of education of the "spontaneous activity" of animals by their pleasures and pains.

To what force can this activity be due? Growth-force only constructs, and is *potential*, not energetic, in adult organized tissue. Most plants do not display this activity, their movements being mostly due to the influence of external causes on growth. As its exhibitions in the lower animals are so far similar to those seen in animals with a nervous system, its nature is probably similar to that seen in them. This is the "motive force" which has been shown to be allied to, if not the same as, electricity, and has been called "*neurism*." It is converted from certain physical forces by protoplasm.

The brain of man and of other animals is an organ which receives and retains pictures and impressions, both painful and pleasurable. The retention of these pictures is not a state of con-

sciousness, but they may be brought into the consciousness according to the law of "contiguity," or association. That is, that the recurrence in the actual of some object or event which was perceived on a former occasion at or near the same time, as another, not repeated in the actual, will bring the latter before the consciousness. So also the revival of one such picture will bring within the mental vision others impressed on the mind at or near the same time as the first. These successions were in the reality either painful or pleasurable. On the recurrence of circumstances which on a former occasion resulted in pain, the resuscitation of the mental picture, then impressed on memory, produces an anticipation of the pain, and the animal at once flies from the source of danger. So also with pleasurable objects, the resultant action being the reverse, or an attraction to the object. In both cases a previous experience of the relation between the object and the sensation of pleasure or pain must have been had.

There is, in addition, the power of determining differences and likenesses, by which contiguities or associations are originated in the mind, of a character different from that resulting from the relations of times of receipt of the impression. Such contiguities recall pictures to the consciousness in consequence of their resemblances in essential qualities.

On these two bases, together with the perceptive faculties, rest the complex phenomena of the animal and human minds. They are probably physiological functions of brain tissue, for the following reasons among others:

1. Impressions are conveyed by physical means to the brain. The brain can only receive a given number at a time without exhaustion, and is prepared to receive more after being nourished. Impressions long forgotten are revived in certain states of disease. Impressibility and memory are most marked during growth, and diminish with age.

2. If impressions are physically produced and preserved in the brain, those made at or near the same time would remain close together in the brain, and this material proximity would be the "contiguity" according to which they would come before the consciousness.

3. Classification or appreciation of resemblances takes place unconsciously in the mind (by "unconscious cerebration"). Re-

semblances not seen at the time of impression suddenly flash into the consciousness on a subsequent revival of it. The "contiguity" to like things thus established may be more or less lasting in the mind than the contiguity of circumstances under which the impression was made.

4. As "contiguity" in time is believed to be revived by contiguity in location of impressions in the objective part of the brain, so "contiguity" of resemblance may be believed to depend on contiguity of location in the subjective part of the brain.

The retention of the contiguities of time and of resemblance constitute the basis of education of an animal, and its intelligence will be in proportion to the number and complexity of these acquisitions.

The lowest exhibitions of contiguity, or association in time, do not require a nervous system for their display. The *Protozoa*, which are without nervous system, exhibit its results in their determinate seizure of some small objects as food, and rejection of others. The sea anemones (*Actinia*) display some preferences as to the substances to which they attach themselves. All power of taking food implies the retention of the impression of pleasure on first accidentally coming in contact with it. This power is then present in protoplasmic beings of the simplest type.

All the movements of animals have been shown to depend on a direction of this motive force, consequent on a necessity for avoiding pain and obtaining pleasure. It may be regarded, moreover, as a truth, that heightened vitality or energetic conversion of force is always a state of pleasure, while depressed vitality is generally the cause (as well as a consequence) of pain. Hence the pleasurable nature of taking food and the early education of an animal in the distinction between objects nutritive and non-nutritive.

It is well known, however, that food may be taken, and many or all other functions and acts be performed, *automatically*, or in a state of unconsciousness. This is as much the case with the highest powers of thought (as in unconscious cerebration) as with the humblest acts which satisfy bodily wants. The question then arises whether these acts may not *arise* in a state of unconsciousness. So far as our own self-knowledge goes, we would reply in the negative. All intellectual functions are produced by education, and education involves consciousness at every step.

Other habitual and automatic acts were originated consciously, but the contiguity of parts of the act becoming impressed on the brain, future repetitions of it are reflex or unconscious. We have seen that the development of the habits of animals is in strict obedience to the preference for pleasure and avoidance of pain. Pleasures and pains of course express sensations which involve consciousness. It then appears to me that in the lowest animal consciousness must be present at the time of origin of every habit, but that it may have been soon lost in each case, and the habit become automatic.

If this position be true, every subsequent addition to, or change of habits must have been accompanied by a resuscitation of consciousness. But how is consciousness aroused in the cases which we can investigate, that is, in our own species? In the common case of sleep, a mere sound is sufficient to cause its return. In syncope and other forms of loss of consciousness, a sudden shock, as of cold water thrown on the face, will often restore it. In ordinary states, compulsion or pressure will induce a more intense degree of consciousness. Indeed in many persons consciousness varies greatly under different influences; thus a dreamy state naturally follows a lack of nutrition of the brain, as during a fast, but the mind is readily aroused from it by a strong or sudden impression made on the senses, or by an effort of will. It is, hence, to be believed, that in animals whose acts may be largely automatic, consciousness is aroused by exceptional sights, sounds, hunger, and other sensible impressions, the more readily in proportion to the development of the sensory ganglia of the brain. In the lowest animals, consciousness will be aroused with much greater difficulty, and life must be in part a blank, and in part a dream, at rare intervals illumined by gleams of consciousness produced under the influence of strong external stimulus. At these times of awakening, we must believe that new movements are instituted, which will become habitual in proportion to the extent to which they are repeated.

From what is known of reflex actions, it is known that movements may become habitual and hence automatic wherever vesicular or gray nerve substance exists. Thus movements instigated by the spinal nerves derive their automacy from the spinal medulla. This axis no doubt derived the original nerve-force

from the brain, but repetition of the act under the original stimulus, confers the automatic power on the spinal cord or ganglionic center as certainly as on the brain. This must of necessity follow the complication of nervous structures by addition to the original center. Thus are explained the automatic movements of the frogs' or centipedes' legs when separated from the brain or principal nervous center.

Greater difficulties are experienced in accounting for the origin of the automatic movements of plants. It is evident, however, that many of these, perhaps all, are not due to the energy of motive-force, but are phenomena of growth-force alone. Motion is produced by the change of direction imparted to growth-force by the influence of heat, light, contact, etc. This will largely follow as a consequence of the longer persistence of growth in plants than in animals. In some of the very lowest plants movement would seem to be similar to that seen in the lowest animals. The origin of intelligence is then to be found in the first traces of consciousness. But inquiry will go further in the search for truth. Prof. Huxley declares that he believes consciousness to be due to certain molecular changes of nerve (*i. e.*, brain) substance. No doubt these are essential to consciousness; yet it is, at least, utterly inconceivable that any molecular condition should be capable of recognizing either pleasure or pain. Here we find the first appearance of the "feelings," that part of the human mind which deserves to be called, *par excellence*, "the soul," and which is the "locator" of all the forces which go to build up the tissues, organs and parts of the body; and hence the organic type of the intellect and even of the will. For if we find growth-force to be a correlative of physical force, and subject to motive-force for its "location," so while we find that motive-force is in like manner but another equivalent of ordinary force, we find it also subordinate to this principle which "locates" it.

7. On Intelligent Selection.

We will now retrace our steps along the line of causes and effects, and see, if possible, the nature and results of "Intelligent Selection."

Protoplasm, homogeneous or cellular, discharges a force called

"motive-force" or neurism, which it converts from surrounding forces by virtue of its molecular (chemical) or atomic constitution. Its spontaneous exhibitions as movements, bring it into contact with surrounding objects, when, if sufficiently sensitive to impressions, it arouses a consciousness of a pleasurable or painful character in the "vital principle." Then in proportion to its sensitiveness, and the strength of the impression, the protoplasm *retains* the latter in an unconscious way, and on the subsequent recurrence of the object to the consciousness, the pleasurable or painful attribute is also revived by the law of "contiguity." The vital principle again interfering restrains the motive force from exercise toward it, if it be painful, or releases it for motion toward it, if it be pleasurable. This quality of the vital principle is a power of choice, and in so far as *consciously* exercised, is *will*. Nothing is better known than that acts originated consciously may, by repetition, come to be exercised unconsciously, or as habits. The form these habits take will depend on the opportunities and conditions offered, for instance in the matter of food, by the surrounding order of things. Motive-force is, of course, only another name for effort and use: the former being a putting-forth by means of *conducting* material or organs, without *executive* apparatus; the latter, always requiring organs or parts by which to execute.

If, as previously assumed, effort and use locate growth-force, cellular structure will appear in the directions followed by the activity of motive-force. It is converted by protoplasm from heat and chemism, or one only of these. That it does not require differentiated "motive-force" as a source, is proven by the growth of plants, which have no motion proper.

Growth-force, by its "repetitive" action* creates organs. These at first will be extremely simple, but as machines, at once increase the power of the animal to produce motive-force by conversion, whether the machine be a digestive apparatus for the appropriation of the material, or a mechanical one for the exercise of the force, the former necessarily preceding the latter in time.

With the increased power of assimilation (digestion) comes a larger amount of material for increased exhibition of growth-force,

*See Method of Creation on the Law of Repetition.

a part being burned or otherwise converted into the force, and a part remaining as the material from which the cells are constructed. In the latter part of the growth period a considerable portion is usually consumed for motive-force.

In the history of the material world around various changes of condition succeeded each other. Changes of level took place; waters were purified by precipitation of chemical compounds; fresh waters were established; the atmosphere deprived of various gases; new mineral, and especially vegetable products, took their appropriate places. All these offer a vast variety of food supply and opportunity for the pleasurable discharge of motive force, and under the laws pointed out, efforts of animals were directed in various lines, as the conditions presented themselves. Thus executive organs were produced of varied character. Some acquired limbs and others wings for transportation from place to place. What a vast addition to their impressions must have been acquired by the first animals which could thus leave the place of their birth! How many new "contiguities" were established, and how many new habits originated! Look again at the acquisition of teeth. From a soft uniform diet the animal no doubt gradually learned to appropriate hard substances, and what a world of experience and consequent habit must have been at once placed in its way!

These acquisitions are of course mental, and include both kinds of contiguity, viz.: that of succession in time, and that of association through resemblance. Animals choose between objects chiefly in accordance with the first mode, but are not lacking in the second quality. As an example of the latter, classification according to color is exhibited by some birds, which choose brightly colored objects and reject dull ones—the Australian bower-bird, for instance.

As is well known to metaphysicians, these acquisitions lead to "predication" and "forethought." Thus a hound becomes acquainted with the habit of a buck or rabbit in doubling, or in following a given circuit. The recurrence of the chase recalls the habit in consequence of contiguity of the impression of the former pursuit of the animal and the course it took. The hound then supposes or "predicates" that the deer will repeat the course. We know that some do so, from the fact that they have been observed to cut off the curves in the animal's track, or to station themselves

at the point where the deer, for instance, will pass. In the second act forethought is also involved. The hound sacrifices the lesser pleasure of the chase for the greater one of securing the prey. In forethought, experience teaches which circumstance results in greater and which in less pleasure; and action is restrained in the presence of the second for the sake of procuring the first. Thus in ants, immediate pleasure suggests a life of labor enough for present wants, and ease for the remaining time; but the greater pleasure of existence during some time of scarcity, has induced some of them to lay up a store, which has developed into the complete protection against winter seen in cold climates.

In the cases cited it is perfectly evident that the hound would never have learned to predicate, had he not had limbs to bring him in contact (by pursuit) with the habits of the buck. Nor would the ant have learned to provide if it has not been furnished with the jaws necessary to the excavation of chambers and the carrying of food. And neither would have performed these mental acts had they not have possessed nervous centers capable of sensation, retention and classification. But the development of these qualities depended on the possession of the executive organs.

Thus intelligence of various degrees has resulted, first, from possession of executive organs; secondly, establishment of contiguities by their use; thirdly, from classifications based on contiguities.

There are two notable examples of the great advance in mental accomplishment inaugurated by the acquisition of an executive organ. The first is the acquisition of the hand by the monkey. Any one who has compared their manners with those of the species of unguiculate (clawed) animals—as, for example, the dog—must be struck by the immense advantage possessed by the former. To begin with, it renders the monkey an expert climber and catcher of moving objects. Then he greatly increases his habits of observation by the facility with which he brings objects before his eyes. The minuteness of his criticism is aided by his power of manipulating with his fingers. He learns the results of throwing. A cautious monkey, set on a strange animal or person, does not rush at them to bite like the dog, but takes the more refined method of throwing sticks and stones. In obtaining objects, if they be out of reach, a monkey uses a stick to draw them in with. In a

cebus capucinus in my possession, a leather strap was preferred, and was thrown with great dexterity, and the object always secured by drawing it nearer in loops of the strap. If the strap was sometimes thrown out of reach, the monkey would use a stick or poker in order to obtain it again. All this would have been quite impossible without a hand. This facility has not been lost on the intelligence of the monkeys. Their curiosity is proverbial, and no animal can compare with them as successful thieves; moving in bands, with watchers stationed, and taking pains to store their booty in their cheek-pouches while they have opportunity, and not wasting time in eating exclusively.

Another instance is that of man. Here the acquisition consisted of vocal organs capable of speech. Any means of communicating and recording thoughts had the stupendous consequence of rendering the acquisitions of one man or class of men the common property of all. Another consequence, equally important, is the preservation of successive races of men from the necessity of passing through the experiences of those that preceded them, and the enabling them to commence their intellectual life nearly where the others left off. So great would necessarily be the location of activity in the brain, that man's stages of growth would be the principal changes of structure to be witnessed in human history, together with those which should result from loss of growth-force in other regions by abstraction.

To return to the material aspect of the case. The discrimination between pleasure and pain locates motive-force, which is derived from without. Motion or use locates growth-force, also derived from without, and thus produces organs out of material derived from without. These organs diversify the directions of motion. From new movements arise new pleasures and pains, and motion is again "located" in its exhibitions in some particular directions, and restrained in others. These directions depend on external circumstances at the first. The determination of motion to certain lines locates growth-force in those lines, and new parts are produced, which are further executive organs and types of structure. We now repeat the circuit. New executive organs introduce new contiguities, the number depending on the general complication of the animal in connection with that of the organ, and new pleasures and pains result. The pleasures again

determine activity, and, under the circumstances already mentioned, growth-force is again located.

In these facts lies the explanation of the principle of direction or location of executive structures about the head, termed by Prof. Dana "cephalization." The increasing demands of intelligence locate growth-force round its organ, the brain, etc., while such location reacts by furnishing means of increased activity of mind.

These conjunctions of growth with executive capacity, constitute a class of "expression points;" points attained without leaps, and abandoned without abruptness, but constituting great steps of progress, pregnant with future results.

The part played by "Intelligent Selection" remains to be considered. I have heretofore spoken only of variation of types, and not dwelt on their *persistence*. This is a most important consideration, for most men see a great deal more of the latter than the former. Species present their characters intact for long periods, and many structural peculiarities have had great range in time.

I recur to the origin of the "location of growth-force," *i. e.*, the direction of motive-force. This is located by the appreciation of pleasure and pain. Now every one knows that different animals of the same species vary exceedingly in their sensitiveness to exterior influences; that is, they differ in the degree in which the same object affects their *consciousness*. That which excites one is unnoticed by another; what fills one with alarm scarcely rouses the attention of another. It is well known also that differences in the power of retention are to be found in the same species of animals. The variations in persistence of memory are very great. While therefore one individual of a species will acquire a store of "contiguities," another of the same will possess but few. In other words, the degree with which objects are *impressed* on the consciousness, and the degree with which they are *returned* to the consciousness, vary greatly in the same species. Here we have the basis for the origin of totally different unconscious habits and reflex actions, and consequent divergences in the "Location of Growth-Force."

Those in which these impressibilities are most highly developed will accumulate mental acquisitions most rapidly; in other words they will be the most *intelligent* of their species. While others

follow the old routine of once acquired and then inherited habits, those in whom consciousness most frequently recognizes events, will *originate* new acts and new habits.

Intelligence is a conservative principle, and always will direct effort and use into lines which will be beneficial to its possessor. Here we have the source of the fittest—*i. e.*, addition of parts by increase and location of growth-force, directed by the influence of various kinds of compulsion in the lower, and intelligent option among higher animals.

Thus, intelligent choice taking advantage of the successive evolution of physical conditions, may be regarded as the *originator of the fittest*, while natural selection is the tribunal to which all the results of accelerated growth are submitted. This preserves or destroys them, and determines the new points of departure on which accelerated growth shall build.

If the above positions be true, we have here also the theory of the development of intelligence and of other metaphysical traits. In accordance with it, each trait appropriates from the material world the means of perpetuating its exhibitions by constructing its instruments. These react by furnishing increased means of exercise of these qualities, which have thus grown to their full expression in man.—EDWARD D. COPE.

CARLYLE AS A HISTORIAN.

“HISTORY, like zoology,” says Taine, “has, nowadays, found its anatomy.” Further on, he describes Carlyle as discovering, with justness, exactness and depth of insight, “a soul, beneath its actions and its works.” This seems to define the essence of Carlyle’s genius; the inner source whence he derive his power. His method, and the great defect of it, is negatively described by an American critic thus: “Mr. Carlyle has no artistic sense of form or rythm, scarcely of proportion. He therefore looks on verse with contempt, as something barbarous, a savage ornament which a higher refinement will abolish, as it has tattooing and nose-rings.” “He is a preacher and a prophet—anything you will—but an artist he is not and can never be. It is

the knots and knarls of the oak that he admires, and never the perfect and balanced tree."

Let us imagine this brawny young Scotchman, leaving his pedagogue's desk in Fifeshire, and having stoutly resisted his father's importunities that he should become a pastor of the Kirk, starting forth to seek a literary fortune amid the London vastness. He is stamped, clearly, with something of the weird ruggedness, the stern and firm sturdiness of his native wilds; his imagination luxuriant as the heather on the Dumfries hills, and bold and plunging as the Highland mountain torrents, is the intellectual counterpart and reflection of the scenes of his childhood, the mental type of a grand and unkempt nature. Lowell says that imagination, when it lays hold of a Scotchman, possesses him in the old demoniac sense of the word, and that hard, logical nature, if the Hebrew fire once gets fair headway in it, burns unquenchably as an anthracite coal mine. Carlyle was a young Puritan. Puritan by birth and circumstance, if not by epoch; and was born in the bosom of the land which seems the fit cradle of seers and prophets.

He launched himself boldly upon the path of his ambition; he made his debut upon the world's stage with a heart hot in its indignation for shams and the worship of "phantasms," a brain teeming with clamorous ideas; from the first he seems to have searched boldly and intensely for the essence of things, for what was in the soul of men and of events, mindless of form, utterly despising the literary arts, and only enwrapped in a burning zeal for absolute and unfettered truth; and so he wrote, and at the very beginning of his literary career we are able to perceive the dawning of that intellectual state which resulted in downright hero-worship. We can also perceive the evidences of a mental condition which was already prepared to receive with eager exultation the teachings of "the true sovereign souls of Germany," Goethe and Schiller, as well as those of Hegel, Lessing and Richter.

The five silent years during which he studied, with an ardor such as a nature like his alone could study, the later German writers, colored for life his intellectual vision, imparted to the growth of his thought a sap which has sufficed to his old age, and at once completed and gave a new direction to the quality of his genius. Here was a Puritan whose highest sentiment was that of

duty, impregnated with the German passion for descending to the nethermost depth of things, the German patient attention of research, and the German love of mysticism. Goethe's vigorous and comprehensive wisdom awed him into veneration; he was indescribably charmed by "Richter's wild music, as of weird harps, floating around us in fitful swells, but soft sometimes, and pure, and soul-entrancing as the song of angels." Out of that century of decay, the eighteenth, plunged, as he so often dived into our ears, in "cimmerian night," there came to him at least this aurora-borealis of German genius, renewing and inspiring a soul which, though yet young, had already begun to sicken at the shams and false appearance of all things that he beheld around him; and now that he has imbibed the Germanism of the age of the re-awakening, the age included between the appearance of Lessing, and the death of Goethe, Carlyle re-enters the world of letters possessed of a multiplex new strength. Retaining all the gifts with which nature and the Scottish Puritanism of his origin had endowed him, his keen scent for the moral picturesque, his abundant, often grotesque and sometimes excessively and violently bitter humor, his splendor of illustration, his unequaled range of diction, his fervor, which is especially remarkable for its ability to exhibit quickly succeeding stages of white-heat, his vehement volcanic force, his imagination, not less dramatic than broad and profound, his critical genius—retaining these, he derived from his German masters the development of other powers which had hitherto lain dormant beyond his consciousness; the power to search after and grasp the broadest generalizations, and to reach behind what men of science call second causes; the power to dive to the very pith and center of his theme; the power of discovering, inventing; the power of reaching conclusions by escaping the processes of logic, and throwing method and classifications to the winds; of achieving great truths, and breaking in upon hidden mysteries, with the leap and impatient fury of a giant seer. Thence too he learned the power of infusing his being into that of a historic hero, and listening, as it were with his own soul, to the passions and desires, the temptations and shudderings, the struggles and self-wrestlings of the historic soul. So it is that he becomes immersed in a past that is not dead, but for him is alive and convulsive with human passion, with its "cimmerian night" now and then illum-

ined, in a fitful flash, by tremendous truths, of which heroes are the lanterns. Thus Carlyle was, in one sense, a poet; he became a seer, a revealer, a retrospective prophet.

With his native Puritanism dissolved in German warlike mysticism, transcendentalism, and long grasp of remote truths, he began to write history. He wrote first the "French Revolution;" then the "Life and Letters of Oliver Cromwell;" lastly "Frederic II." Other scraps and waifs of history and biography appear among his writings; but upon these three his fame as a historian or historical biographer, rests, and it is by these that criticism has judged, and posterity will judge him. We cannot but think that these histories, viewed in succession and in comparison, mark three successive eras in the history of Carlyle's mind. They betray a growth and a decadence; a rise and fall; the inevitable course of a mind powerful indeed, and the most searching of its time, but which clings with a too exclusive tenacity to the abstract, delights to envelope itself in mysteries, and grows thence to love what is lurid, amorphous, and volcanic; and ends in the gloom of cynicism, producing a fierce, bitter, and even ribald humor, which, nowadays, too often reminds one of the demoniac laughter of Mephistopheles in the opera; and in a misanthropy which rails at one nation as "forty million of bores," at his own as infected by a "foul elephantine leprosy," and at the whole world as lying in atrophy and agony beneath upas-boughs and poison exudations.

Carlyle unquestionably stands forth as the creator of a new method of writing history, as well as the founder of a new school of criticism. He is the first of English-writing subjective historians; reproducing men and events, with slightest tangible data, from within himself; he evolves the philosophy of history, not from constitutional and revolutionary changes, not from magna-chartas and bills of rights, not from the movements in moral and intellectual life of popular masses; these are but the outer garments, or at most the flesh, clothing the spirit, bearing analogy to the senses as distinguished from the soul; he evolves it from humanity itself, from the inner man, from his own subtle soul-sympathy, which reaches back into the past, reawakens the souls of Cromwell, of Mirabeau, and of Frederick, that their pulsations may be felt and their secrets shared. These great men's souls are the key-notes of all history;

once reach them, and the outer phenomena, from being a sealed book, have become a living letter. Indeed, with Carlyle, all outer visible phenomena are but symbolic of these souls; the whole world, and all things visible in it, are symbols, just as, according to Sartor Resartus, the very garments of men and peoples are symbols. The only thing real is the invisible, or at least that which is only visible to the seer himself; we see nothing but appearances, phantasms, shadows; truth lies hid in the last recesses of the unseen.

Truth, then, he found to reside in the "Konig, or able man" of the past, and in him only; and it was the truth which this able man had in him, and uttered, either by words or by action, that made him able. The transition from such a mental state to that of hero-worship, and from hero-worship to the canonization of false heroes, can with little difficulty be imagined, though to follow and articulate it requires a subtle exercise of the intellect. Carlyle as a historian rests himself upon the idea that heroes, or leaders, mould men and society, and are the only truth-possessors; the malleableness of the hero to his times and to the influence of the aggregate thought and civilization, he indignantly scouts; the times are prepared for the hero, not the hero by or for the times. Peoples are mere elements of brute force; the common sense of the many is, to him, the mere craving after "Pig's-wash," the universe being "an unmeasurable swine's-trough," and the heroes, the pig drivers. The struggles of peoples are, "The Dance of Death;" the progress of the despotless nations is but a ghostly jig of skeleton-like phantoms toward the grave.

He did not on beginning to write history, leave the dreamland into which Goethe and Schiller had led him, as Virgil led Dante, through the regions of the nether spirits; in contemplating the great drama with which the century of decay went out, he presented it by a series of vivid and often terrific and awe-filling tableaux; with a historical scheme mainly epical, he illustrated causes and effects by the characters and deeds of the principal actors. The marvelous life-likeness which he imparts to his heroes shows the genuineness and intensity of his seer-like vision. We see Cromwell and Mirabeau, Frederick and Voltaire, in their old-time costumes, and with their external peculiarities, as vividly as we do Mr. Pickwick with his gaiters, and Uriah Heep with his

clammy hands. In his "French Revolution" we find the best qualities of Carlyle displayed. He here betrays great pathos and tenderness, for when he wrote it he had not yet constituted himself the universal Doctor Busby, with rod in hand, querulously chiding, and on occasion frantically lashing his big, naughty truant boy, the world. Of some of the passages in the French Revolution it may be said of him as he said of Jean Paul, "love is the atmosphere he breathes in, and the medium through which he looks."

There are many passages in this history, and a few in Frederick, which bear such an aroma of touching poetic sweetness, that we hate to pass thence to the hurly-burly which we know is coming. In this work too, he is not yet soured by the refusal of the world to follow his leadership; he has not yet learned the evanescent nature of literary popularity; and hence we have, now and then, a passage—I had almost said a stanza—full of grandeur, inspired by perhaps a fleeting, but at the moment zealous, admiration of his race. The characters are so living, so sharply drawn, that no such portraiture is to be found elsewhere in English prose; still the hero has not as yet wholly emancipated himself from the logic of events. The worship of force is not yet a mania which fails to discriminate between moral and brute force. There is no space to speak of the Cromwell, which in some respects is the greatest monument of Carlyle's genius. The character of Cromwell himself was never recognized before he brought him in bold relief to the vision of the fancy, in such bold relief that we are compelled to believe in its exactness. The idea of duty which was the deepest inspiration, and which explains the success of insubordinate armies, and of nasal drawling, and Scripture-quoting, and apparently drearily canting statesmen, has a charm for Carlyle which has inspired him to the greatest effort of his genius. Still it may be seen that in the Cromwell, Carlyle is drawn further on in his hero-worship, and has come to put greater faith in mere strength, than in the Revolution, and singularly enough, his greatest portrait serves as the transition from the Revolution, wherein the heroes are guided as well as guide, to the Frederick, which is the epical consecration of downright despotism. In Frederick, the historian has, in his old age, reached the goal of despotic heroism; he has at last set up the "Konig, or able man," as an idol; and he has become reckless as to the object of his idolatry. Goethe and Schiller might

well entrance a deeply emotional soul; Sterling was surely an able man for good; and the inner Cromwell was more heroic than the heroes of the *Iliad*. But from these Carlyle has gone wide astray. In the days of his bitter and scornful old age, he saw fit to erect one more statue in his Walhalla, with a rude, cruel, scoffing, domineering, envious, pedantic, narrow and intensely selfish king. Frederick's heroic virtues, in Carlyle's eyes, were the indomitable persistency with which he pursued his projects, good or bad, the fine discipline which he established in his army, and the intense energy with which he bent himself to crush the power and filch the possessions of a young empress who presided over a rival state.

Carlyle throughout these histories displays the minutest care for exactness of date and truthfulness of statement, and a truly German patience and persistency in searching authorities and determining the truth. This is especially observable in the first volume of the *Frederick*, wherein he traces the descent and gradual aggrandizements of the Hohenzollerns. Yet for facts, or events, merely as such, he has a withering contempt. Dickens, who was intimate with Carlyle, must have created *Gradgrind* for his especial benefit. One can imagine the crusty old *Sartor Resartus*, in his attic in Cheyne Row, chuckling over this ripe impersonation of English utilitarianism. Throughout his history all apparently commonplace events are skipped over as rapidly as possible; diplomatic negotiations, the quiet progresses of civilization, the even tenor of national life, civil reforms and administration, are inexpressibly irksome to him; he makes them serve only as brief links connecting the drama, as in the theaters two domestics talk inanities in a shift-scene, while the grand incidents are being prepared behind them; and he hastens impetuously to the next explosion, the next volcanic eruption, the next chance to send a fiery rocket of unpolished though gorgeous rhetoric whizzing to the upper air, and his imagination is not only dramatic, but it is feverish—sometimes extravagant, rash and weird; the dramatic glowing to melodrama, which is grand indeed, and deeply stirs us, but leaves in the mind a sense of sulphur and brimstone. He would rather envelope us in "the infinite night, with her solemn aspects," than with "day, and the sweet approach of even and of morn;" in a night, too, full of wondrous portents, the sweep of terrible comets, and the down-shooting of

strange aerolites. His glow is too terribly lurid; and in the pages of Frederick we are drawn too rudely into the whirlwind of war and the tempests of bad ambition, which seem to drive Carlyle's soul into a perfect wild ecstasy of exultant passion. Still he is great, for he seems to have rushed hot from the scenes which he describes, to sit down and recount them while their infection was still upon him; in the Revolution, it is as if the great painter had worked on his canvas while standing in the very midst of the pandemonium of the terror.

One can fancy the printers, when a new work of Carlyle's came to the composing-room, sending in hot haste for a few extra thousands of dashes, interrogation and exclamation points; for in these his books abound, and they seem to symbolize the spasmodic abruptness, the deeply inquiring effort, and the awe and amazement of his mind.

In his earlier days he surely had intense convictions; amid vagary and passion there shone out a love of sincerity, manliness, and a living faith. Whence came the melancholy change which turned him into a scoffer at democracy, a churlish sneerer at modern progress, a masculine Cassandra, shrieking foretold woes in the ears of men? Lowell thinks that it was the straining for sensation, when he saw his popularity waning; disappointment in his literary ambition; these leading him to practice the eccentricities of style and expression for their own sake, which had originally sprung from his contempt of art and form; and it is doubtless true that Carlyle is not one of the unspoiled children of literary fortune. Having reached a high plane of literary fame, and astonished the world by the range of his ideas and the wealth of his diction, by the intensity and rugged splendor of his early style, he was loth to abdicate his literary empire. He loved to play the Plato teaching in the porch, to be the head of a philosophical circle, the mentor of a host of disciples; and his exaltation seems to have given him a Cæsaric sense of power. But this, it appears to me, rather corrupted his style than his philosophy. Deeper disappointments seem to have led him astray, and furnished the world with the aspect of a decayed old man wandering amid the mazes of a diseased imagination; disappointments as to the results of the theories which he so warmly championed; the morbid effects of seclusion and intense study confined within nar-

row limits; the mind being restricted by certain narrow channels of thought, and brooding over events and characters without mingling with men, and thereby recognizing the power of humanity in the mass.

The later increased strangeness, extravagance, and cynical humor of style, may be due to a craving for continued empire; the later misanthropy and worship of brute heroes, to the bitterness of one who has taken a certain stand-point, whence he can see only a part of the field of human struggle, and turns away in disgust at the failures of human frailty, without having contemplated the victories of human strength.

But after we have said our last word about Carlyle's amorphous style, cynicism, false hero-worship, and rabid hatred of democracies, Lowell's judgment, that "with the gift of song, he would have been the greatest of epic poets since Homer," must be confessed to have some foundation. After all he is a noble genius, a writer of whom the English-speaking nations may be proud; a revivalist whose awakening powers have worked great things, and nowhere more than in his histories; a revealer of sublimities hitherto unrecognized; a bold, fearless, and strong-armed guide, the inspirer of elevated thoughts, and the sole possessor of a compass of language which, as has been finely said, "ranges from the unbooked freshness of the Scottish peasant to the most far-sought phrase of literary curiosity."

GEORGE M. TOWLE.

THE PHILOSOPHY OF THE FRENCH REVOLUTION.

BY PAUL JANET.

Translated from the Revue des Deux Mondes, by O. H. K.

THE CRITICS OF THE REVOLUTION.

V.

IT is astonishing that, after admiring, as he did, the night of the 4th of August, Herr von Sybel should be so severe on the Declaration of Rights, which was nothing more than the abstract formulation of the principles of the 4th of August. After the destruction of the feudal system, what, except liberty and equality, remained for the principles of the new order of things? It is true that that Declaration was too abstract, and Mirabeau may have been right in saying that it should have followed instead of preceding the establishment of the Constitution; but, after all, when we to-day read over that celebrated Declaration, we find it difficult to decide which of the Articles should have been suppressed, and which enlightened men have given up regarding as one of the bases of the social estate. It is, doubtless, dangerous to talk of rights to men, and if they could be established, without being proclaimed, it would be very desirable; but, unhappily man is a rational animal, gifted with the faculty of thinking, and, hence, necessarily thinks of his rights, which he conceives under an abstract form, as soon as he feels any need of them. Abstraction and generalization are his greatness and at the same time his weakness.

Our German author acknowledges the lawfulness, and even the necessity of the Revolution, but only with the result of denying its originality; according to him, it is to the sixteenth century, to the German Reformation, that we must go back to arrive at the true origin of the freeing of Europe, and our Revolution was only the last act in that grand movement; according to him, it is a great error to see in our Revolution "the starting point of a new epoch." What were its objects? The respecting of the

dignity of man, the liberty of commerce and labor, the establishment of constant and easy intercommunication between the citizens of the same country, liberty of conscience and of thought. Now these are the same principles which raised up Germany against the Roman Catholic Church, Holland against Spain, England against the Stuarts, and America against England. So everything good in the Revolution came from the principles of reform started by the Reformation, but everything bad originated with itself. Confounding the revolutionary actions with the theories of the Revolution, he accuses it without seeing that all his attacks rebound against reform itself and in general against all historical epochs. For instance, according to him, the Revolution put "the theft of property in the place of economical liberty," as if the secularization of church property by the Protestant princes was an act of homage rendered to the right of property. He tells us that it substituted for justice the persecution of the highest classes, as if the persecution of the Roman Catholics in the sixteenth century had not been everywhere the consequence of the triumph of reform. "It annihilated the power of government," as if anarchy had not been everywhere the characteristic of the sixteenth and part of the seventeenth century. "There was no other authority but that of brute force during two years in France," as if right and humanity had ruled in Germany during the frightful Thirty Years' War.

As to the originality of the Revolution, we confess to being very little concerned whether it was an antecedent or a consequent, a commencement or a conclusion; that it was lawful and reasonable is the only important thing. The more closely it is shown to be connected with the American Revolution, with that in England, with that in the Low Countries, or with the Reformation of Luther, the more will it be proved not to have been an arbitrary and *a priori* revolution, born of false conceptions and utopian abstractions, but that it was, like all the great movements in history, the resultant of all that preceded it.

Herr von Sybel would not have been up to his times, if he had not regarded as one of the fatal and logical consequences of the Revolution, the establishment of "Cæsarism"—*i. e.*, the system which recognizes, says he, the equality of rights for all, and opens to all a career in the service of the State, but which brings in its

train, "commercial prohibitions, the enslavement of the press and of education, and the oppression of the Church." These are vague assertions, and, on some points, contrary to fact, for he himself finds that it was "Cæsarism" which tried to introduce commercial liberty into France, and as to the oppression of the Church, we do not know to what acts the author alludes. In the last place, Herr von Sybel, like all the writers of that time, reproaches France with having ignored the principle of "self-government," and with having exaggerated centralization, as if Prussia had been a model of self-government, and had had but little taste for centralization.

To sum up, French and German critics, by different ways, arrive at the same conclusion, to wit: that the Revolution had two great faults, the worship of force and the exaggeration of the idea of the State; but while one imputes these evils to the Revolution, as if it had created them, the other, more profound, finds their origin in history. This phase of French criticism, represented by De Tocqueville was soon passed even in France by a critic far more severe.

Of all the remarkable writers who, in this century, have exercised the mind, there is not one who has not explained his position in reference to the Revolution. M. Cousin, in the introduction to his "*Political Fragments*," M. Guizot, in his "*Political Miscellanies*," M. de Remusat in his "*Liberal Politics*," Madame George Sand, in her novels, and in a thousand scattered pages, have all of them given interesting judgments worthy of being collected, on the principles, the causes, the effects and the defects of the Revolution; but all these views come more or less within the classes already described, and we must limit ourselves in this rapid review to a new and special phase of the Philosophy of the Revolution. This phase we believe we have found in the few scattered pages which M. Ernest Renan has devoted, as occasion served, to this great subject. It would be preferable to have them collected and developed in a book, but such as they are, and even in their scattered condition, they constitute a mode of thought peculiar and very concise.

Up to this time we have met many friends, many enemies of the Revolution, but in general all the enemies come from one side, all the friends from the other; the enemies from the side of or-

thodox faith, the adherents from the side of free thought. But here we have a free-thinker who ranges himself among the avowed enemies, or at least the very severe censors of the Revolution; one of the masters of criticism who defends monarchical and aristocratic faith against the democrats; the author of the "Life of Jesus" holding out his hand to the author of "The Pope." From the same cause spring the piquant originality and the weakness of the political views of M. Renan.

M. Renan seems to have passed through several phases of opinion in reference to the French Revolution. He himself tells us that he succumbed, as did everybody, to its prestige, and that it had subjugated him by its air of fierceness and greatness; but that a closer study led him to a greater strictness of judgment. This second phase of opinion places M. Renan almost in the same position as M. de Tocqueville, and all the liberal party of the second empire. But he mingles with it somewhat of the historical school, and, as the fashion then was, a little Germanism. He reproaches France with having sacrificed the "German to the French element," *i. e.*, liberty to equality, or the individualistic principle to that of the state. Such appears to have been the opinion of M. Renan in his earlier works.* There was nothing in these criticisms which a sincere friend of the Revolution could not accept, and from all sides, by different roads, liberal minds tended to unite on this medium opinion, contrary, at once, to socialism and to caesarism, those two dangers to the revolutionary spirit.

Soon we see appear in the writings of M. Renan a new and entirely different point of view. It is not only now the sacrifice of the individual to the state, of liberty to equality, which is the object of his criticism, but the principle of equality itself. Democracy is no longer, as M. de Tocqueville thought, a wise and just state, but on the other hand necessary to be corrected, watched over, and made better. The passion for equality is an increasing one which swallows up all others, causing narrowness of views. The aristocracy becomes an ideal before which our poor society of to-day seems flat and vulgar, and at the same time devoured by the lowest passions. The error of democracy is in not understanding that society is "a hierarchy," a vast organization in which whole

*See "Essays on Morality and Criticism," 1869. Chapters on M. Guizot and M. Sacy.

classes should live of the glory and pleasures of others. The peasant of the *ancien regime* "worked for the nobles," and loved them for that; he rejoiced "at the high existence others led with his sweats." While democratic jealousy does not see the beauties of the feudal and aristocratic *regime*, the "rough and superficial" philosophy of that school has never in the least understood the rôle of royalty. The French royalty was more than "kingship," it was "a priesthood." For it France had created a "new sacrament." This sacred king "performed miracles." This religion of Rheims was the religion of Joan of Arc, for which she lived and died. In face of this enchanting picture of the past, the new society cuts but a sorry figure; it is a "materialistic regiment which discipline takes the place of virtue." The people which came out of the Revolution were a "proud and ill-bred people." The principle of all our laws is "jealousy." In the false democratic philosophy, virtue is only the "rough claiming of rights," and the most virtuous race is "that which makes the most revolutions."

It is, however, a very easy process to take the good of one side and the bad of the other, to idealize the first and exaggerate the other; but that is not the course which strict history ought to pursue, and is confounding politics with æsthetics and poetry; it is necessary to take each society with its good and evil, without exaggerating either by the imagination, and this work done with care would probably give results very different from those proclaimed by our brilliant critic. On one essential point we can say that light has been thrown—the question of happiness. On this point at least, the superiority of the new society is recognized; it is always spoken of with considerable disdain as if it were a thing of little importance, in comparison with the moral and poetical beauties of the aristocratic *regime*. However, when we read in Vauban that 6-10ths of the population were beggars, it must be acknowledged that there are shadows on the fine pictures. But, again, politics are not æsthetics, though, perhaps, it may be that the true criterion of a well-constituted society is precisely this so despised happiness. A rich society is one that works; a working society has not bad morals; a moral society has good soldiers, and with instruction will have good citizens. Such is the series of facts, which permits us to conjecture that, notwithstanding the

most melancholy crises, such a society has within herself the means of safety without going back to worn-out institutions, which have lost all their virtue. That if this society has in itself a principle of corruption truly incurable, it may be asked if that principle was not transmitted to it by the past, and if the Revolution instead of being its cause was not simply the powerless remedy.

In another of his works,* M. Renan has summed up in several bold and severe sentences his arraignment of the French Revolution; and it must be regretted, that such live criticism should be accompanied by such insufficient proofs. The Revolution, said he, was an honorable struggle; but that is merely politeness for he adds immediately that it was a "fruitless trial." Why fruitless? By no means. On the contrary nothing has better succeeded than the social reforms of the Revolution; they have gone through all countries, and it does not need a great spirit of prophecy to predict that they will resist all assaults.

Another critic has gone much further than M. Renan in his severity against the Revolution. The brilliant works of M. Montegut are too recent and too present to the mind of the reader to be necessarily closely examined. He does not content himself with proclaiming "the bankruptcy" of the Revolution, but declares it "irrevocable." We do not know whether the bankruptcy of the Revolution is irrevocable, but certainly the Revolution itself is. There are but three types of society possible: the society of the *ancien régime*, that of the Revolution, and that of socialism. The first has perished beyond recovery, and if the second has gone into bankruptcy, there remains only the third, and thus, to rid us of one disease they give us a cure which is worse.

In another order of ideas, the author of a recent book on "The Heritage of the Revolution," M. Courcelle-Seneul, declares the failure of the Revolution; but he does not believe its failure is irrevocable, nor does he think that it of necessity would bear an unhealthy fruit, but that the fruit, good in itself, had been hurt by false physicians, or in other words by bad governments. He protests with de Tocqueville and all the writers of the liberal school, against the tendency to centralization shown by our society; but instead of referring these tendencies, as is ordinarily

* Preface to his "Questions Contemporaines."

done, to the Revolution itself, he affirms that it was against that very thing that it was made. It is the *ancien regime* which is alone to blame, and if we are still under the dominion of a despotism, it is because the edifice destroyed by the Revolution has been in a great measure reconstructed by the Empire and all the subsequent governments, the Republican party itself not having been more backward than the others in utilizing the great combination to its profit.

These views were worthy of being historically demonstrated and supported by numerous proofs; but this has not been done by the author, his object being rather to propose a plan for political reconstruction than to give a historical or philosophic explanation of the Revolution. Politics in the abstract lays down true principles, but in the concrete has for its object to make the principles agree with the elements of any given case, and we should go outside of our object if we were to follow the author in his plans of social and political reconstruction, on which we should not always agree with him. We admit his conclusion, that there can be no question of a reaction against the Revolution, but that it is necessary to take up its work, to consolidate and continue it, making use of the experience acquired during the last seventy years.

In fact, it is the means and not the principles of the Revolution, which we must condemn; its object was wise and lawful, its means were detestable, and often changed the principles and made them corrupt; and in this way confusion has been caused in men's minds, the word "Revolution," applying to both object and means; so we must admire the spirit of the Revolution, even while repudiating the revolutionary spirit.

The Revolution wished to attain right, and knew no way but by force, in such a way, that, while seeking to establish justice it violated it. Force is, doubtless, the auxiliary of justice, and a necessary instrument in human affairs, and besides, when the right is violated by the lawful powers, what other means of redress is there but force? America, England and Holland have all set us the example, but the only justification of force is in resisting oppression, and not as a means of oppression; and, further, the employment of force should be rare and exceptional and not become the regular thing. Such is the double fault of our Revolution, that force, instead of being only a means of resistance,

became an instrument of oppression, and instead of being used only during an exceptional crisis, was transformed into a regular habit.

People say that all the kinds of political experience have been tried in France. But there is one left—the government of the country by itself, instead of serving parties to make parties serve it. No party, either Conservatives or Democrats, has the absolute right to govern the country. The first believe they have the right because, in their own eyes, they represent the principles of law and order, and the others think they have the same right, because they believe they exclusively represent progress and justice. They are both wrong, they both owe their services to the country, but have no authority over it; it is the only judge, and the day when they accept sincerely and definitively the authority of that supreme judge, the revolutionary spirit will be conquered and the cause of the Revolution gained.

AMONG the notable signs of the times in Germany is the removal of Herr Von Mühler the Prussian Minister of Education and Public Worship. Von Mühler, was the very embodiment of the policy pursued by North German rulers ever since the French Revolution, of throwing their whole weight on the side of Conservative Protestant Orthodoxy. In politics a sincere conservative and strong Royalist, and in theology a strong Lutheran, he had missed no opportunity to promote his own views and to favor those who held them. Of course in Germany the range of freedom in matters of opinion is much greater than in the churches of England or America, but more than one heretic was made to feel the weight of the minister's hand. His removal has excited the greatest surprise, and as it was made it at the instance of the Crown Prince, his determined enemy, it may be taken as an indication that the government cannot be expected hereafter to the play patron to ecclesiastical and theological conservatives.

A correspondent of an English journal gives an amusing story connected with the hostility of the Crown Prince to Von Mühler, as evinced at the Fifty Years' Jubilee of the University of Bonn in 1868. It seems that Von Mühler, the head of church and school

in Prussia, the grave and pious leader of the religious party [was] in his youth a *flotter Bürsche* (a jovial student), and some verses which he wrote at college are, as they deserve to be, amongst the best-known and most popular in the collection of Bacchanalian songs called the *Commersbuch*. The nature of this first effort of Von Mühler's muse may be gathered from the following stanza :

*Gerad' aus dem Wirthshaus nun komm' ich' heraus,
Strasse ! wie siehst du mir wuaderlich aus ;
Rechter Hand, linker Hand, alles vertauscht
Strasse, ich glaube wohl, du bist berauscht.*

*Was fur ein schief Gesicht, Mond ! maocht den du
Ein Auge hat er auf, das Andere zu,
Du wirst betrunken seyn das seh' ich hell,
Schäme dich, schäme dich alter Gsell.*

In the sequel, the hero of the song, amazed and alarmed at finding the street, the houses, the pump, and even the moon itself, in a state of uproarious intoxication, considers it dangerous for a sober man to venture farther, and returns to the shelter of his *Wirthshaus*.

The festival above mentioned was attended by all the alumni, old and young, of this celebrated seat of learning, by the most celebrated statesmen and men of science, and by the *Princeps Juventutis*, the Crown Prince himself. A banquet of 2,000 covers was held in the grand court of the Poppelsdorfer-Schloss, at which the jovial spirit of the German student reigned supreme. Among the toasts was one of course to the great head of the educational department, the Minister Von Mühler, who acknowledged it in a long and unctuous speech, in which he urged upon his youthful friends the duties of industry, temperance and obedience. Meanwhile, a message was sent from the upper table to the splendid band, which never fails on such occasions in Germany. No sooner had Von Mühler sat down than high and loud rose the jovial melody on Von Mühler's *G'rad' aus dem Wirthshaus*. Two thousand voices joined in the familiar song, which was sung throughout with enthusiastic gusto, and followed by repeated peals of laughter. The Crown Prince raised his glass, and bowing to the astonished Minister, said : " This, I believe, is a compliment to you ! " Von Mühler was not equal to the occasion,

but looked crushed and angry, believing that the prince himself had brought him into this somewhat painful and ludicrous position. The real culprit is said to have been the Minister von der Heydt."

We find in the *Hartford Advocate* this English version of part of the song, which falls short of the swing and comic force of the original:

Just from the tavern I'm hurrying here—
How very odd to me, street, you appear!
Everything turned, on the left hand and right;
Verily, street, I believe you are tight.

Moon, why do *you* twist your face all awry?
One he has open, and shuts t'other eye,
Clearly I see it, that you are too tight:
Shame on you, shame you, old drunken wight!

Ha! and the lanterns too—what shall I say?—
Straight not a single one's able to stay.
This way and that way they totter and flare:
Dead-drunk all of them I do declare.

Large things and small things in storm whirling round;
Shall I alone 'mong them sober be found?
That is too risky, the courage I lack!
So to the tavern I rather go back.

WE have been favored by the following extracts from a private letter, which we heard read, and thought it would be pleasant for our readers to have some of it themselves. The first extract is general, but speaking of what we have not often seen noticed—the wonderful western prairie *sky*, and the second about Monument Park, and the "Garden of the Gods."

"But, after all, perhaps the thing which is the most striking and most beautiful feature of this prairie scenery is *the sky*. For one thing, there is a vast extent of it, such an expanse as one sees at sea, but it strikes one all the time. Then its wonderful color, I never saw such *daylight* skies, as there are here, and it is an unfailing source of delight to watch them. Looking away off over these plains to the wide horizon, a feeling of solitude and dreariness grows upon one, and it is a relief to turn and look at the clear dark outline of this most glorious of mountain ranges, standing out against a sky of such purity, and yet of such depth of color, as I have never seen elsewhere."

"Monument Park! We stayed two nights there, spending Sunday in one of the most wonderful temples ever seen."

"All this country has been under the ocean, and the traces of wave-action are everywhere present, but nowhere more strikingly than in Monument Park, as it is called, an opening in the hills filled with curious formations, which, at a little distance, look exactly like gigantic statues, but which, on a nearer view, are seen to consist of rock, formed of sea-sand and pebbles, worn into all sorts of weird and bizarre shapes and figures, and rising often many feet in height. Sometimes the rock is quite hard; sometimes you can dig out the sand with your fingers. Generally on the top of each statue lies a slab of red or gray rock—usually gray, very hard, and altogether unlike the sandy mass of the statue. . . .

. . . I thought and said that lovely as the country and climate was I should pine after awhile at being so many miles away from the ocean and the sea-beach, when, as we walked along under the pine trees, we looked down, and there lay before us just such a white, smooth, sandy beach as you might see at Rye this day. There were the drifts of sand beyond high-water mark, and just behind, the stunted pines that we see in such places. We hastened down then, and not until our feet *actually rested* on the spot, could we persuade ourselves that it was *rock*, although in one large place it was still sand. What would you have done, had you stood there, so far from all the oceans of the globe, and picked up sea-shells, from a beach that was dry land when the world was young?"

NEW BOOKS.

SEPTIMIUS FELTON; OR, THE ELIXIR OF LIFE. By Nathaniel Hawthorne: Published by James R. Osgood & Co., Boston. Price, \$1.50. This is the last of a complete edition of the writings of Hawthorne. The edition affords an opportunity to add one more to the lasting treasures of the library. In speaking of this book, Una Hawthorne says: "The following story is the last written by my father. It is printed as it was found among his manuscripts. I believe it is a striking specimen of the peculiarities and charm of his style, and that it will have an added interest for brother artists, and for those who care to study the method of his composition, from the mere fact of its not having received his final revision. In any case, I feel sure that the retention of the passages within brackets (*c. g.*, p. 30), which show how my father intended to amplify some of the descriptions, and develop more fully one or two of the character studies, will not be regretted by appreciative readers."

SPEECHES ON THE TARIFF QUESTION, AND ON INTERNAL IMPROVEMENTS. By Hon. Andrew Stewart. This valuable work is published by Henry Carey Baird, Philadelphia. Price, \$3.

Andrew Stewart was born in Fayette county, Pennsylvania, 1791, and elected to Congress in 1820. He represented his district in the National Councils for eighteen years, and was during all that time recognized as being, with Henry Clay, one of the two great champions of American industry in the country. The arguments are as applicable, as fresh, as convincing and as instructive at this time as they were in the days on which they were made.

SAUNTERINGS. By Charles D. Warner, Boston: James R. Osgood & Co. This volume is rightly entitled. To saunter is, not to travel, not to settle down as a resident, but to go and come when and where one's fickle pleasure directs. Mr. Warner tells us what he saw of the low countries, Bavaria, Italy, Switzerland and the capitals of France and England. Other writers have seen the same, and have written books on what they saw, but few have treated the subject in the same happy way. He has made an old story new and fresh.

THE MOSQUE OF THE GODS, by Bayard Taylor, James R. Osgood & Co., Boston, has also been received, and merits a full notice, which we hope to give it soon.

D. Appleton & Co., New York, send us "Christina North," by E. M. Archer. Also, "The Path-finder," the third of the Leather Stocking Stories, by J. Fennimore Cooper. Illustrated: Pp. 207. Price, 75 cents.

Also, "Sybil's Second Love," by Julia Kavanagh, one of a new and tasteful edition of the works of that author.

RECOLLECTIONS OF PAST LIFE. By Sir Henry Holland, M. D., etc. New York: D. Appleton & Co. 1872. Pp. 351 with index. \$3.00

What a vast difference there is between this and ordinary biographies, most of which are of men either limited in duration of life, or of comparatively narrow circle of acquaintance; different and much more interesting on both accounts, even comparing it, which he himself calls an outline with others written with great fullness of detail. Few men have had such a combination of personal qualities and favorable opportunities as our author, and probably none can or could say, as he did to the present Earl of Derby, that he had attended that nobleman's great-grandfather some 45 years before. No one has had such an immense variety of people for patients and friends, men and women distinguished by birth, by education and by talents, and yet with all this, his book is such a mere outline, and that outline is so entirely Sir Henry Holland, that the impression produced by it is one of decided disappointment, that from such materials a better book should not have been made.

A SEVEN MONTHS' RUN, UP, DOWN AND AROUND THE WORLD. By James Brooks. New York: D Appleton & Co. 1872. Pp. 375.

On receiving this book we thought, "Another tiresome, stilted book of travels," but the preface removed some of our fears and we read it with constantly increasing pleasure, notwithstanding the fact that there is a great deal of repetition, following naturally from the disjointed way in which it was written, the letters having been merely brought together without the author's revision. The consequence of the construction of this book is the freeing it altogether from the stilted, subjective style which characterizes the descriptions of most books of travel in which natural objects seem to lose their individuality, and to be covered as with a veil by the peculiarities of each author's mind, the impressions being left there so long as to lose the sharpness of outline necessary to please others. This fault is altogether wanting in the present volume, for as you read, although the descriptions may not be in very glowing language, there is a freshness and life about it which carry the reader along until when he arrives at the end he may wish to have bodily followed the author even if only to exclaim with him:

My own, my chosen home, oh, what were blest,
Than that sweet pause of troubles, when the mind
Flings off its burden, and when, long oppressed,
By cases abroad and foreign toil, we find
Our native home again, and rest our head
Once more upon our long lost, long-wished-for bed.

THE
PENN MONTHLY.

SEPTEMBER, 1872.

EVOLUTION AND ITS CONSEQUENCES.

IV. MORAL EVOLUTION.

1. *Preliminary.*

It may be asserted that the theory of development is the only theory of creation before the scientific world at the present time. Some assert in opposition to it, that *God made* the species, and that their gradual evolution dispenses with his interference and authorship. Will our critics explain to us *how* God made the species independent from the start? No opponent of development has attempted to do this, and until it is done, there can be no theory or doctrine in the field other than that of evolution. The evolutionists not only believe that God made all things, but they attempt to show in the field of biology *how* he did it.

If they are correct in their interpretation of the facts, there can be, and is, no interference between their views and the purest morality and the most faithful religion.

Theologians have also feared evolution as a probable enemy of Christian theology, seeing in it either a purely utilitarian or an intuitive philosophy based on necessity. But these fears are unnecessary. Scientific induction is *a posteriori*, and theology has long since taken hold of the prominent facts of human spiritual history. That the many theologies explain the nature and rationale of these facts correctly is, however, not probable, since they all differ from each other in some degree. And here evolution,

especially the metaphysical, comes in as an aid, and will prove the regenerator of theology proper. Its light will enable the laborer to see and sweep away piles of rubbish that cumber the temple, and at the same time to link into one chain of human experience that great basement truths, which are found in all, Buddhist, Mohammedan, Christian or other.

As to "Natural Theology," its value is doubtful, but so long as matter and force remain without explicable origin, there is no fear of the universe being without a Creator for those that wish one.

The philosophy of evolution accounts for the moral and spiritual growth, on a basis of knowledge of the human mind, derived from the observation of human acts, and criticism of human consciousness. Most masculine minds find a difficulty in believing ancient testimony for the supernatural alone, without corroborative evidence of the consciousness, and one result of this theology will be to throw men yet more upon such evidence, though the founder of Christianity taught it in frequently declaring that "the kingdom of God is within you." If any prefer the evidence of testimony without a prior evidence of observation or consciousness by which to corroborate it, I would tell them that locality is all that has attacked their faith to the Hebrew Bible. Had they been born in the east they would have venerated the Koran, the Vedas, or the Triptaka of Buddha.

Observation and experiment are as necessary to the comprehension of religion as of any other subject which includes visible phenomena. And it is obvious that persons who have given attention to neither are not fit critics in the case. It is as absurd to condemn religion without having sought to experience it, as it is to deny the phenomena of chemistry without having tested their truths in the laboratory. And men are found who, while they accept the testimony of others in reference to external phenomena, deny far more overwhelming testimony regarding phenomena of consciousness. They say perhaps that we can test the outward experiences and substantiate them, but the internal ones are not to be tested by any such means. I would reply that inward experiences are to be attained, and may be experimentally understood, and that they are attended by demonstration of the most infallible description, not only to the consciousness of the experimenter but to the observation of other men.

Facts of great value to the observer are to be found in the different moral and spiritual conditions of men. The good and the bad, the honorable and dishonorable, the vicious and the moral, the benevolent and the cruel, are contrasts expressive of the wide range of human character. They constitute a body of facts which must at once provoke inquiry as to the source of the differences. As the lower traits are identical in their exhibitions with those that predominate among the members of the animal kingdom, and as we believe man to be the last of that kingdom in the line of descent, we believe that the moral advance constitutes a growth from a state inherited from the animals, to one of great superiority and of commanding dignity. Our business at present has to do with this evolution.

In previous chapters it has been stated that the present appearance of the organic creation was due to the mutual action of two classes of principles, the *originative* and the *directive*. Natural and sexual selection were regarded as the directive, while "Growth-Force," "Motive-Force," and a "Vital Principle," were regarded as the originative. Of the latter, the "vital principle" was the only one not referred to as a correlative of physical force.

2. Utilitarianism.

In moral evolution we believe in like manner, that two kinds of principles have operated, the one *originative*, the other *directive*. The directive principles are educational in their character, and are an outgrowth of the evolution of intelligence. They have been largely explained by the utilitarian school of moral theorists. Without pursuing very fully a subject to be found in the writings of Hobbes, Hume, Bentham, and others, it may be pointed out that these writers trace the origin of morals to the discovery by men of the rules necessary for their comfortable association in civil bodies or societies. Experience soon teaches the most barbarous men that they cannot live without mutual respect for each others persons and property, and rules come to be observed, which result in customs and habits. Habits long adhered to become, as is well known, "second nature," and become finally incorporated into character. Both physical and mental habits are well known to be transmitted (the desire for alcohol as one example of the first), and becomes more powerful by accumulation in

succeeding generations. On the Darwinian principle of "the survival of the fittest," those men and races who inherit habits, or traits of character best adapted for the beneficial relations of society for preservation of person and property, will increase in numbers and power, while those whose ideas of self preservation are of a less enlightened kind, will remain weak and finally give way to the stronger. The laws of society are thus the expressions of a forethought derived from the education of experience. In this law of progress we have one of the beneficent results of evolution. The desire to protect one's self in opposition to present gratification, is evidently the outgrowth of the development of intelligence, which knows the perils of the one course, and the benefits of the other.

Darwin suggests that the origin of the disposition to act so as to render social organization possible, is to be found in the reproductive instinct, in consequence of which mutual protection and support by two human beings is imperatively demanded by each. The important part which this fact has played cannot be denied.

The most important points in evidence for or against the truth of the utilitarian theory are of course to be derived from an investigation of the facts of human action, as we see them before us. All intellectual demonstration must rest upon observation; and the acts of men afford abundant opportunities for it. The question before us is, *do* men generally or usually act in accordance with an enlightened foresight? *Do* they either in the savage or civilized conditions act habitually in accordance with rules best adapted to preserve their properties and persons from harm? A true utilitarianism requires peace; do men live at peace? Protection to ourselves requires that others should respect or love us; and the brightest utilitarian law is Christ's, that "we should do to others as we would that others should do to us." How are these rules executed by consideration of their utility alone? Let every man answer this question for himself. It is matter of every day observation even in the most civilized communities, that considerations of ultimate utility, *do not* prevent men from committing acts which are directly opposed to their own interests and those of others, in person and property. And on the other hand, we see men perform acts of what we feel

to be moral grandeur, which are entirely opposed to their own interests for the sake of benefiting others.

From such considerations it is easy to suspect that some other motive is at work than that of calculating utility. It may be answered, indeed, in reply to the objections, that the present state of civilization is imperfect, and that the lessons of experience have not yet been sufficiently incorporated into habit and character to be efficient in practice. But this is no true objection, for an inquiry into the motives of human action involves at once the question as to why it is that men differ so *as to what is utility*. In one man it is the protection of himself from all other men and women (for even the sexual instinct, as we may frequently observe, is not sufficient to prevent quarrels and antagonism of the sexes); in another, protection of his family to the injury of other families is the best policy. Some believe it to be most useful to follow rules which benefit their country to the exclusion of other countries, and are willing to inflict the most fearful destruction upon them on the basis of what they may consider utility. But others wish and work for the good of man without regard to self, or self's city or country.

Observation upon men is our surest guide. Now, if men of to-day, with all the benefits of experience and habit, derived from the long lines of human ancestry, fail to conform to the laws of utility, with or without compulsion of social organizations (*i. e.*, as civilized or not civilized), how much less likely is it that the first men, or those who *originated* the existing lines of useful action (to leave out the heroic), were actuated by such motives? Here we are brought face to face with the motives *originative* of human action, as distinguished from the motives derived from education, or the *directive* class.

3. *Intuitionism.*

All customary acts in which the interests of others are considered, irrespective of our own, must also have had a time of origin before tendencies to such acts could have had time to become habits, and be more or less conferred by inheritance. Why have such courses of action been preferred to those in which self alone is considered? But what are we to say of that every-day phenomenon which appears to have escaped the view of the utili-

tarians, that of men whose motives of action undergo a change in a short space of years, or even months or weeks; where tendencies of previous life seem to be lost, and new ones taken up; where, from what we may call a state of total selfishness, a state of universal good-will arises, as indicated by acts in which self is constantly sacrificed. If it be only a question of facts, thousands of examples may be cited in every country, and many cases shown, where the parentage and inheritance generally are vicious. A theory of morals which does not explain these facts is worthless. The utilitarian fails here; let us see what an intuitive theory presents.

I believe that Spencer and others have done a great service to Theology in declaring that the Deity and other asserted supernatural persons and influences are "unknowable"; the "know" being here used in the usual sense of intellection. There is nothing, it appears to me, in the world of matter or force, which demonstrates the Deity as an existence, however much it may be suggested or rendered probable. The only result of a study of nature is a knowledge of *law*, and the attempt to prove supernaturalism from it will always be to many, perhaps all minds, a failure.

The phenomena above described, of change of motives of action in men, suggest much more strongly supernatural influence. If examined, it will be found that this change does not consist in any modification of intellectual qualities or habits, but has its seat in the feelings, or emotions. This department of mind is morally far more important than the intellect; for while the latter teaches where pleasure and where pain are to be found, the feelings determine ultimately what is pleasure, and what is pain. Anything that affects this part of mind must be most radical, for it controls the will completely, and therefore, to a great extent, the actions.

Now the phenomena of acts are easily observed; but an affection of the feelings is not observable. We have therefore to rest further demonstration on testimony either of ourselves or others. This testimony can only be furnished by those who have experienced these affections, but it is sufficient in quantity and most respectable in quality.

Harmony is a state of pleasure, while the reverse is a state of

pain. This is especially appreciated by the developed feelings of the human species. As the various processes of the outer world involve conflict, so do those of the feelings of men in relation to each other, so that pain is a frequently recurring effect. But the capacity for experiencing pain under the same degree of unharmony, or what is the same thing, the capacity to appreciate harmony in all respects, varies exceedingly in different men. Harmony is of two kinds, that of the feelings, and that of the intellect. The latter signifies *correct classification*; but my present subject is the former kind of harmony.

It is evident that it is the foundation faculty of the religious sense. But it is not that sense itself which is a derivative from it. Painful feelings first awaken it by producing a contrast between the ideal standard of harmony and the real world round us. In the savage, the fear excited by the hostile and disastrous phenomena of nature awaken it; in the civilized man, the misfortunes of country, failure of plans of action, or loss of affections arouse it. Thus *religious consciousness* appears, that is, a desire for a harmony of feeling beyond the real. The parallel with mental consciousness in its origin is seen, in that both are aroused by extraordinary and impressive external stimuli operating on a *capacity*, whose origin we know not. Attention being directed to the disasters of feeling in the world, the desire for realization of harmony is kindled, but may be quickly lost again. It will no doubt frequently recur during the life of a man, but the intelligence will generally retain memory of the events and of the resulting states of feeling. Experience of the successful results of labor, will suggest to the will the propriety of acting so as to realize this harmony, if possible; but in order that the will shall so act, it is first necessary that the feelings shall be affected at the moment with the religious consciousness. Many require many arousings from without to produce this condition of the feelings, and it will require also that they be *retained* in the brain, so that it may be frequently brought into the consciousness. Here enters a capacity which has much influence in the retention of impressions made on the feelings; I allude to the direction of *attention*. The direction of attention is under the control of the will; attention may be turned away from a disagreeable object, or riveted upon it. Whether the human being do this or not will depend largely

on the judgment; that is, in the present case, whether the ideal harmony or the temporary pleasure be the most worthy of attention and pursuit. Uneducated judgment will declare in favor of the latter, but even the educated judgment will not always decide on the higher aim. So far as we know, this decision is a matter which rests with this will alone. If the man *choose* to direct his attention to the unharmonious events of life, the preference for the ideal harmony will strengthen; that is, a desire for it will more frequently rise into the consciousness, and the religious sentiment have its origin.

To those in whom this sentiment lives as a conscious state, the following proposition will express a general truth: *that the human feelings are capable of a much higher degree of happiness or pleasure than any situation in the world can afford.* This is, I venture to say, a universal experience, and such as to justify the doctrine "that discontent is the natural, *i. e.*, original, condition of man." Nothing is more certain than that "pleasure is a coy maiden;" and vanishing in the grasp, it is ever eluding pursuit. Success in life has its triumph abated by the knowledge of more beyond, and greatly lessened by the loss of novelty. Indeed the actual pleasure offered by the world purely, becomes comparative, and rests largely on our success as compared with that of other men, be it little or great. Its reality becomes therefore questionable, especially since rivals must in that case become enemies. When on this basis we have reached a "a struggle for existence," identical in spirit with that of the beasts, unlit by one ray of humanity, but livid with the glare of burning cities, and vocal with cries of the injured and the hopeless.

What are those pleasures that come nearest to satisfying this capacity of the human heart? Those of the social affections no doubt, or those of love. Yet the experience of this in the actual rarely comes up to the ideal (I would not say *never*), but in many cases falls very far below it. And even when it approaches the point of satisfaction, just in that proportion enters the inevitable fear of its loss. This loss is inevitable, as the world well knows, and has long asked sadly if there be no remedy.

Has then this capacity for love no source from which to obtain fulfillment? Thousands can answer that it has; and while some (from experience) will hear with a smile of incredulity, and others

will regard it with curiosity only, some will conclude that were it not so Nature and her laws were in vain, and man, apparently their acme of perfection, is really the most miserable of the results.

This hunger for soul-satisfaction or perfect love, will stimulate men to seek for it in all directions. It represents in moral growth the "spontaneous activity" of intellectual history. It is the foundation fact, and is the "intuition" which *originates* effort. Now this seeking will be directed by experience into the channels most productive of results. Experience has already shown that it is not to be derived from the world about us, least of all by a consideration of our own unharmony. The last resort is in prayer to a source of satisfaction, which may be supposed, though not known, to exist. This is the only alternative under the compulsion of the case, and observation shows that it is resorted to by men in cases of extremity of the affections, the world over, whether that extremity be in consequence of affectional activity alone, or stimulated by danger of injury or death. By this means the discovery is made that a joy may be known, which goes far toward filling the void, far transcending in satisfaction its nearest parallel, the love of fellow-beings. In this we have evidence of the supernatural, which no criticism can wholly invalidate, and which, if it be pursued, leads to further evidence by repetition, and a deeper conviction of its reality. Belief in it is as extensive as the human race. It is another of the foundation facts round which cluster all the systems of theology, and much of the superstition of the world. As a satisfier of the *affections* it has appeared to men in a *personal* character, and necessarily so since our nearest earthly counterpart of it is the love of fellow-beings. Hence this inflaming of joy is referred to a person, and Him we term God, and we know none other. The process by which we become recipients is that of surrendering from time to time reliance on the various objects of visible existence, as sources of our ideal harmony. This giving up keeps pace with two growths: first, that of experience of the insufficiency of such objects; secondly, with the persistence of the sentiment of the love of harmony. By *inattention* the latter may be obscured or lost, when, of course, the value of objects as sources of pleasure is measured on a descending scale. The last supposed source of realization of the ideal is our exertion of

our own wills in action among men. The evidence of the insufficiency of this power is often long in becoming established, and when it is established men do not always find the substitute which shall effect the object through their wills.

The feelings in these different stages are of a varied character, alternating between love and fear. Love arises from higher views of perfection. It is a compound of admiration and desire; perfection is surpassingly admirable, and desire longs to possess it; in the possession is satisfaction. But when it appears to us it is not long possessed, and we find our house again vacant or filled only with our own imperfectness. Here comes in fear; first, of the perfectness of power, which may not respect our want of perfectness; second, that we may never regain the view which we found so elevating. The result of these feelings is the desire for perfection in everything ("purism" it is sometimes called), and the effort to restore harmony, wherever we see it lost, naturally follows. One of the readiest means of doing so is to allay physical or mental suffering in those about us. This result is seen everywhere, in Buddhists, Brahmins and Christians, though the distortions and abuses of "charity" are innumerable. From this source spring "disinterested" actions, unselfish and heroic deeds. Hence originates the first generous act which commands admiration at the time, because it coincided with man's ideal of perfection; and the desire of imitation of it is awakened, which leads later to some acquisition of power to execute, through effort directed to its source.

This is the *originative* force; with this given, I believe its results have developed, subject to the *restrictive* laws of utility. Experience has determined the most profitable line of action in obedience to its impulse, and the development of the intellect has constantly given it new directions and new triumphs. And the fittest has ever survived. Not only those who were morally nearest the standard of universal harmony have survived, but among these, those whose advanced intelligence has given them control of the springs of action and the sources of human influence. But let this statement not be understood as confining the source of originative power to the first man, or to only one period in the history of every man.

The intelligence once taught where satisfaction may be found,

and that to obtain it a certain approach in act to the perfections it reveals is necessary, is opposed by the feelings, which find themselves constantly influenced by hereditary selfishness. The physical and other inherited desires seek gratification often without reference to the interests of others, and generally in opposition to them in greater or less degree. Or if utility sees neither of these in gratification, it can find a waste of force, which is so much subtracted from the ability to labor for perfection. These tendencies have been, perhaps, not much weakened in inheritances. They may even have been developed. For the conquests of intelligence over nature often must give, for a time, increased opportunity for the exercise of the selfish or animal qualities, and instead of diminishing they may increase in intensity in the human race. The world has seen excesses of cruelty and lust in individuals which could not be excelled in the animal kingdom. And such traits indulged may involve some degree of pleasure which the individual may pursue to the neglect of that higher capacity they once possessed, till it would seem to be utterly extinguished. Human beings in such a condition are human but in form, and display as much the development of evil (as it is called) as others do that of good.

The inherited evil then shares with the acquired good, the dominion of the feelings, or motives of action. This double occupancy is by no means peaceable; the sense of perfection is constantly violated by selfishness, and love having learned to regard its parent as a person, earnestly longs for his revelation, and fears its loss in view of the victories of the enemy of harmony and love, the natural self. This struggle is a state of growth, but growth is slow, or may, in point of execution, appear to be null or even to be followed by retrogression. But the consciousness is being prepared for another lesson, as momentous as the first, and much more efficacious as a controller of actions. Experience finally satisfies the judgment that efforts of will cannot realize the ideal harmony of action, because the feelings are not yet so habitually in a state of love as to direct the will habitually. The feelings are indeed in a state far short of a realization of their capacity for love. It becomes clear that even the will is insufficient, and the understanding gives it up as a reliance. Then the feelings are prepared to receive impressions.

The impression which is at this time made is one of love and reconciliation. The author of such impressions appears consequently as a friend, and not as the inexorable author of perfection, whom we cannot approach, and whom we must fear while we admire. He appears as recognizing the struggle that is going on in our feelings as inevitable, and that the substitution of the higher motives for the lower is not accomplished at once. There is impressed conviction that he accepts our love, and overlooks our unharmony. This is a second fact of consciousness, which can only be asserted as matter of experience, and that by great numbers of men. It becomes incorporated into our beings, for we cannot but regard the demonstration of feeling as the most positive of knowledge. What are the consequences? To the love from admiration and desire is added the love from gratitude and hope. Fear is in great measure banished, and a state of confidence induced which is called *Faith*. The soul is filled to its capacity for happiness, and the event has been well compared to a marriage. Here is then immediately a great accession to the power of the will to execute harmony and perfection; the love is seconded by confidence, and the unharmonious nature totters in its already reduced kingdom. The direction of the motives into harmony with that which is, in itself, the author of all harmonies, becomes confirmed, and the personal source of the influence becoming a necessary belief to the understanding, he is addressed by men in terms of admiration, love and request for His presence and power. This is worship.

This event constitutes the great "expression point" in the history of the feelings, for though there was preparation before, and there will be a growth after, it is like crossing a line from darkness to light, a veritable passage "from life unto death." The law of the reappearance of the joys of perfect love is found to be nearly connected with the degree of *attention* which we pay to its pleasures in preference to those of an inferior character.

It is probable that the obstacles to this supernatural influence are primarily offered by the understanding, in men possessed of the religious sentiment; for it is not until the resources of prevision and forethought, and of acquisition, are exhausted really or ideally, that the feelings are educated into the receptive state. In the first men the understanding was rudimental; further, their ex-

periences of pleasures and pains were far less extended than in modern men. Hence their first state was probably like that of children of the present time. A fuller development of understanding and feeling by experience in creatures inheriting nothing but selfishness, would only aid that selfishness in the execution of its desires. Under such circumstances moral capacity would only develop with a growing appreciation of harmony engrafted on the inherited nature.

For moral development then we must have a development of the motives of human action, which is generally called a "spiritual" development. For this is required, first, a capacity for distinguishing harmony of feelings from conflict of the same; second, a habitual preference for the former over the latter; third, an endeavor to realize the former in fact; fourth, a conviction that realization is not to be procured by use of anything offered by the visible world; fifth, a consequent willingness to obtain those means by passive reception of a supernatural impression which harmonizes the feelings with its source; sixth, an execution of harmony or *right* by the will as a consequence.

No doubt men exist whose states are expressed by all of the above positions, who thus exist in different developmental stages. They are probably represented by whole tribes or even races, whose advance has depended on the abundance of *their means of acceleration*.

4. *Acceleration by instrumentalities.*

As all "acceleration" in morals, as in other growths, is accomplished by instrumentalities, all experiences of men, by which others are to benefit, must be communicated by the material instruments of voice and hearing, (*i. e.*, "preaching,") otherwise, as the world now is, they would fail. All accumulation of knowledge must come through language, and the material, mechanical and intellectual instrumentalities involved in writing, and recording, otherwise man had remained where he began, even in morals; for such records are a necessary part of the growth of intelligence, which is the *directive* and accumulative element in all human progress. Thus it naturally results that men make and preserve records of the histories of their feelings as well as of their experiences in other departments of thought and action. And as the

affections, after all, interest men more than anything else, it is natural that the histories of these should be the most valued and the most carefully preserved.

In this light, the importance which attaches to the best records of spiritual history may be more clearly seen. It may also be readily believed that truths attained by certain men through material agencies, as those of the senses, which have not since been exhibited in a material form, might only be preserved for our use by means of the records of them. There is no doubt that this must be the case with the acts and words of great men, who have exercised an influence on human progress. Without records of these, their influence would be excessively curtailed. Nevertheless it is impossible to conceive of an absence of records, as man is constituted.

As a check to the influence of writings of a purely imaginary character, we have first the results of intellectual growth, and the resulting knowledge of the laws of nature; and secondly the view of the perfections of God, through approach to Him. Whatever record does not accord with either of these tests, *each checked by the other*, must be false, no matter what its name or authority.

Of the ancient nations, the Chinese, the Hindoos and the Hebrews have left such records, as is well known; such are the Buddhist Triptaka, the works of Confucius, the Vedas and the Bible. The most highly developed nations of moderns have regarded the Bible as more nearly expressing the facts of our actual spiritual history than any others. It is not only found to express our needs, but to point to those means of supplying them which are known to be sufficing. Gifted men, whose writings are included in it, foretold the development of the human race, as well as the special vicissitudes and disasters which accompanied it. They foretold the success of that principle already alluded to, a "*faith that works by love*;" faith being the state of mind where love is the motive to *work* out a real harmony among men. This foretelling is another indication of the inspiration or view of perfection, which is here claimed as a fact of experience, the direction being in this case with reference to the plan of development of the species.

It would have been strange indeed, in consideration of these supernatural facts of experience, if some record of them had not

been kept, and those which relate to the future been preserved. And this record will then often stand us instead of the power by which it was written, when that is only with us in memory, and we are in so far better off than men were before it was written. Here again we have an "instrument" of *acceleration*. That it has been such is evidenced by the fact that those nations which are in the van of moral and intellectual progress are precisely those who have used it in its office as an unfold of ever-developing truth; of truth expressive of the law of moral evolution. As examples of its expression of facts of moral growth, three passages may be selected. One of these from the prechristian writings says: "The *fear* of the Law is the *beginning* of wisdom." This describes the first stage of experience; now states that it is the first, or the *originative*. The second expresses the highest utilitarian aim of religion; it was one of the sayings of Christ, "we should do to others as we would have others to do to us." The highest step, and that in which man is in the best condition to execute, was described by St. John, successor of Christ, when he said that "perfect love casteth out fear."

5. Conclusion.

The points considered may be summed up as follows:

1. Moral growth depends on the growth of the feelings as originative, of the intelligence as directive, and of the will as executive.
2. The feelings have the moral capacity of loving or of apprehending personal harmony; in others words, of distinguishing moral pleasure and pain.
3. A supernatural revelation of perfection, while present, satisfied the sentiment of pleasure, but this result is restrained by a sentiment of pain, *i. e.*, fear, caused by perception of imperfection in the subject.
4. These sentiments become motives of action which, directed by the intelligence, become "conscience," and the actions of moral habits.
5. At a point of progress a supernatural revelation of perfection combined with one of acceptance, impresses the consciousness.
6. This banishes fear to a great extent, awakens love, and adds gratitude, which operate as a more complete alternative of the feel-

ings, which direct the will more nearly into acts in harmony with perfection.

7. The records of past experience and knowledge confirm those of the present, and preserve some facts not repeated subsequently, which are essential as explanatory of present experience.

Certain points of resemblance between the plans of intellectual and moral (or spiritual) evolution may finally be pointed out. Both have their origin in a capacity for distinguishing pleasure from pain. Both progress by a constant acceleration, the more perfect traversing the preliminary stages rapidly, which were formerly life occupations. Both have their "expression points," where a gradual advance becomes a rapid one by the coincidence of approaching points, whose combination produces great actual results. Both advance by the mutual working of two principles, *originative* and *directive*, which I have elsewhere called the "harmonic" and "conflicting."

EDWARD D. COPE.

THE IDEA OF A UNIVERSITY—I.

FROM THE GERMAN OF PROF. FRANZ HOFFMANN.*

I take occasion to-day to address you, my honored colleagues, upon a subject which possesses for all of us, although in different ways, the closest interest, to wit, The Idea of the University. Even if I am unable to say anything entirely new upon this highly important subject, after what has already been said by a brilliant host of the most gifted and the most penetrating minds of Germany, including among them the greatest geniuses of the last and the

*Franz Hoffmann, of Würzburg (not to be confounded with various German novelists of the same name) is the chief living representative of the philosophical school of Baader. His laborious edition of his master's works (1850-60 in 15 vols.) prevented his engaging in independent labors on a large scale, but in 1868-9 he collected his shorter treatises and dissertations into two thick volumes, with the title, *Philosophische Schriften*. That which we here present stands at the beginning of the first volume, and was an address on the occasion of succeeding Von Lasaulx, as rector of the university. We have omitted the opening sentence. Finding that the supplementary notes on the history of the subject fitted very well into the text and did not break its continuity, we have presented them there, marking their character by the use of smaller type.

present generation, a Kant, a Fichte, a Schelling, a Hegel, a Schellermacher, a Steffens, a von Savigny, a von Jacob, a Bernhardi, a Thiersch, a Leo, etc., who have given expression to their views in writings of great worth—yet my efforts will not be destitute of value if they are directed to bringing again before your thoughts, my honored colleagues, in a single view and in concise outlines, what you have always known; and likewise to vivifying to you, my academic friends, who are occupied in study, what you have already learnt, as well as to fully disclosing to you for the first time the idea of a university and the importance of the academic studies and life.

Were we to glance, first of all, at the historical origin of the university, we could not assert that this might be traced to any impulse to pursue science exclusively for its own sake. On the other hand, neither can it be said that science was fostered merely for the sake of realizing more safely and effectually the aims of the Church and of the State, and for the support and the well-being of life. At all events, however, the pursuit of science *first* found its source in the practical necessities of life, and afterward men pursued it with the especial purpose of removing the practical evils of life by a wider and broader insight into the true nature of things; in a word, by giving order and form to life by means of science. It was still later, when science had attained to a more important stage of development, that there arose in the inner consciousness of men a sense of the unlimited and unbounded greatness of science itself.

The first germ of the origin of the universities of our Christian era must be sought as far back as the time of Greek and Roman antiquity. At Alexandria, Rome, Athens, and later at Constantinople, there flourished educational institutions, which were essentially nothing but universities, and in some cases on a large scale.

The historic course of the culture of the human race proceeds undeniably from East to West. The Orient is the first stage of human culture, and as Europe was first peopled by westward immigration from the East, so also the first gleams of progressive culture came to Europe from that quarter. There can be no doubt that the first teachers of the people of antiquity were the priests; whatever science and wisdom existed among those peoples was concentrated in the priesthood, and was disseminated in part at least from among them to the other classes of society. The oldest schools were, therefore, those

of the priesthood, and the religious institute was the center from which all rays of culture emanated, and into which they again returned. In proportion to the importance of the services of the priest for the work of uplifting the most ancient peoples from their savagery and coarseness to a higher grade of culture, would necessarily be, on the other hand, when a certain point had been attained, the strength of their efforts to confine the culture of the people within limits fixed upon by their own class as the monopolists of science and education, which it was their prerogative to dole out to the people. That was the case with the oriental nations. Their educational institutions, such as existed and still exist in India, Egypt, Persia, Chaldea, China, etc., have never advanced science beyond the childish stage. The intellectually gifted Greeks broke through this bondage of the sciences, though never completely, and the Romans in the main followed in their footsteps. It was the very spirit of the oriental culture that the individual should be lost in the mass; he counted for nothing in himself, but had merely the importance of taking a part in the whole ascending movement of life. The Greek spirit conquered for the individual his rightful place, as did that of Rome, which contributed largely to the same development as regards single persons, even while it destroyed and broke down national individuality. Neither Greece nor Rome, indeed, could lead on to a universal culture of humanity, since both lacked what Christianity first introduced, the spirit of universality and freedom, which was manifested in its assigning to every man the same place in the sight of God. Yet the Greek and Roman spirit was a preparatory school in relation to the culture which presented itself in Christianity. In particular they rendered great service in the organization of educational institutions. Out of the lower schools, which we find pretty early among the Greeks, there were formed from the time of Solon schools of philosophy, not at the instance of the State and under its inspection, but from a free impulse, as soon as any man distinguished for intellect, knowledge and the gift of teaching, came forward as a teacher, and succeeded in collecting around him a circle of persons desirous of learning, who voluntarily associated themselves with him. Next to Thales, Heraclitus and Anaxagoras, Pythagoras deserves mention in this connection; the historian Dahlmann says that one might call him and his circle of disciples the oldest university. But what might be called the higher schools of the Greeks kept forming from the era of the Peloponnesian war, especially in Athens, which became more and more the meeting place of cultivated men from the free cities of Greece. There Socrates taught and labored in intercourse with so large a number of gifted men and disciples, and scattered the seeds which in Plato almost completed the Greek philosophy, while he himself gave proof of his profundity and greatness even in the one-sided conceptions by which he impaired himself to less noble and less gifted minds. There taught and labored the divine Plato in the Academy founded by himself, surrounded by a noble circle of the most cultivated of his contemporaries of all ages; there he unfolded the most profound and the most lofty views that the Greek intellect was permitted to attain, and in a form of the most perfect artistic beauty that could be achieved in consonance

with the Greek genius. After his death, and by his own direction, his nephew Speusippus, succeeded him as head of the academy, and the succession fell in turn to Xenocrates, Polemon, Crates and Crantor. In Xenocrates' time Aristotle founded the Peripatetic school of philosophy in the Lyceum, and was succeeded by Theophrastus, Straton and finally Lycon. Contemporaneously with Polemon and Theophrastus, Epicurus founded his school and provided for its continuance after his death. Almost at the same time, only five years after the founding of the Epicurean school, Zeno of Cittium established the Stoic school in one of the most beautiful halls in Athens, and he too took care for its continuance after his death.

However, the schools at Athens, including the new (also called the Second or Middle) Academy founded by Arcesilæus, and the Third Academy founded by Carneades, and also the school of rhetoric—which was still zealously cultivated—worked on the old plan of free union, being attended not by Greeks alone, but by Romans. Meanwhile Ptolemæus Lagi (or Soter) founded the Museum at Alexandria, the first High School of learning that was erected and directed by the State. Its teachers, mostly learned men from Greece, being assured of a permanent income, could, with so much the greater zeal and less distraction, devote themselves to the pursuit of science.

Even though the old and severe Romans, such as Marcus Porcius Cato, at first withstood the introduction of Greek philosophy and science into Rome, yet their resistance could not long prevail. The conquests of Alexander had extended the Greek language, science and culture through the lands which Rome afterward incorporated into her great Empire, so that these had become the common property of all the cultivated peoples of the Roman world. Thus it became at last a political necessity that the Cæsars should make provision for educational institutions. The Emperor Vespasian was the first to walk in the footsteps of the Ptolemies, since he assigned considerable salaries to the Roman and Greek rhetoricians. Hadrian completed the excellent work thus begun by establishing the "Athenæum" on the Capitoline just at his accession to the government. Antoninus Pius (A. D. 138-61) enlarged this institution of learning by the establishment of a chair of Philosophy, and became the founder of the "Imperial Schools," by endowing institutions in all the chief cities of the Roman world, which were formed after the example of the Athenæum. Constantine the Great, after the transformation of old Byzantium into the new Imperial City of Constantinople, founded there an educational institution upon a still more comprehensive scale. Besides these that I have mentioned, there arose similar scientific institutions at Antioch and Tarsus in Syria under the Seleucidæ, at Pergamus under the Attali, in several cities of Bythinia and Cappadocia, in the island of Rhodes, in the Greek cities of Megara, Corinth, Megalopolis, Sparta, Thebes, in Smyrna and Laodicea, and last of all in Sicily. But on the whole the richest and most varied scientific life flourished in Alexandria, where the kings of Egypt had provided for the establishment of a comprehensive library of Greek, Roman, Indian, Persian, Ethiopian, Babylonian and Phœnician literature. This extensive institution

of learning, which numbered among its directors in earlier times the kings of Egypt, and at a later period the Roman Caesars we have named, can the more easily be compared with the universities of the Christian era, in that among those who taught there were scholars of the most different departments, philosophers of all schools, mathematicians, astronomers, geographers, physicians, anatomists, teachers of natural history, grammarians, critics, poets, historians, and last of all, Jewish and Christian theologians, such as the authors of the Septuagint, Philo, Josephus and the Evangelist Mark, Pantænus (the first scientific teacher in the school of theological science), Athenagoras, Clemens, Origen, etc. But in the third century all the more important cities throughout the Roman Empire had established chairs for teachers, secured them incomes and bestowed public honor upon them. These institutions of learning, however, had nothing like the importance of that at Alexandria; they took for their subjects of instruction chiefly grammar, rhetoric and philosophy.

The appearance of Christianity in the Roman Empire, and its victorious extension, made at first no essential change in the organization of these schools, even when in the conversion of Constantine it achieved its political victory over Paganism. Even though we hear many bitter complaints from the famous teachers of that period, that had not gone over to the church (from Libanius, for instance), that priests and monks passed through Greece in hordes, armed with torches and instruments of destruction, and had not only laid the temples in ashes and destroyed the idols, but had even declared a war of extermination upon books and schools, especially against those that still existed in Athens; yet on the other hand here and there doctors of the church, such as John Chrysostom, declared with the greatest zeal and emphasis against the reading Homer and other pagan poets with Christian children, as was done in the schools still in charge of pagan teachers. This state of things continued with the exception of a single interruption, which proceeded not from the leaders of the church, but from the Emperor Julian, who thought to destroy and annihilate the Christians by excluding them from scientific culture. With that temporary exception it continued usual that the youth of the empire should receive their education in the public schools of the pagan teachers, where they were taught and made acquainted with the works of science and of art produced by classic antiquity. Even in the educational institutions newly founded by Christian emperors, teachers as well as scholars were received without any reference to their religion, and instruction in religion, as much as public worship, remained entirely excluded from these institutions. Even after the complete disappearance of pagan teachers, as of paganism itself, even after the time of the elder Theodosius, no essential change took place in these institutions in the direction of christianizing them, and through all the later centuries, down to the overthrow of the Eastern Empire, we find that the old customary branches of instruction were still persevered in—grammar, rhetoric and philosophy. In spite of the lack of inward unity in the Eastern Empire, and the chronic faults of its administration, it lasted until its conquest by the Ottomans, A. D. 1453, and the prosecution of such scientific studies as the literary wealth inherited from classic antiquity

prompted was carried on to the last. As long as the great school at Constantinople kept up. The very destruction of the Empire by the coarse and savage Ottomans compelled the Greek scholars to fly to Western Europe, especially to Italy, with those noble treasures of the intellect of antiquity, whereby science was kindled into new life.

The transfer of the capital of the Roman Emperors from Rome to Constantinople had caused Italy an important loss in regard to scholars and the means of scientific culture, which had of necessity extended its effects to all the westerly countries of the empire. This loss must have been far greater in fact, and its effects more widely felt, when the Roman Empire divided into the Eastern and Western Empires.

With the overthrow of the Western Empire through the incursions of the German tribes, these extensive institutions of learning disappeared from its boundaries, together with the numerous schools that the Roman emperors had founded in Italy, Gaul, Spain, Africa, and all the countries subject to the Empire. What remained of the sciences was driven to the retiracy of cloisters and abbeys during this time of distress, and there found welcome and a refuge among the Christian clergy. From this quiet concealment, from the midst of this clerical class, science was again to come forth with renewed youth in the restored Empire of the West, and to press onward with growing steps of progress to the point at which the culture of the age had become sufficiently ripe to take up again the great idea of a university, and to realize it in new forms.

At the incursions of the northern Germans into the Western Empire Christianity had already been universally disseminated within its boundaries. The kingdoms newly established upon the area of the old empire by these living and powerful German communities soon did homage to the genius of Christianity. At last it pressed victorious into the primitive forests of Germany, overthrew the old gods and planted the banner of the Faith in one God and in his Son the Saviour of the world. The noble German people were called in the eternal decrees of God to become the bearers of the new world-idea, and to introduce a form of life and culture which should in all things correspond thereto.

Already before the appearance of the Germans upon the stage the Christians of the first centuries had at least in part transferred the classical culture of the Greeks and Romans to the new era. That era, therefore, in giving its new shape to things, did not entirely dispense with the treasures of the old culture in the construction of the new edifice. As the fathers of the Church of those first Christian centuries labored to put themselves in possession of the treasures of the culture of antiquity, partly because they themselves had grown up within the territory of the universal culture of the times—partly because they themselves, unless possessed of a thorough knowledge of it, would not have been able to carry on with success their controversies in the defense of Christianity, partly

in the last place because they—or at the least the Christian teachers of Alexandria—recognized especially in the Greek philosophy a divine preparation for the reception of the Christian revelation—therefore it was that, in the new kingdoms of the Germans, of necessity all culture was found in the hands of the clergy. To them, therefore, the problem fell of introducing a higher culture among the youthful peoples of the German stock, who possessed at once so much capacity for development, and yet so little actual development in this direction. Yet the institutions of learning that arose in the Christian era after the migrations of northern peoples were by no means destitute of all connection with the imperial schools which had existed in the Roman Empire. The memory of those schools could hardly have been utterly extirpated. They did not disappear until the first half of the fifth century. The old university at Rome, if we may so call it, continued its existence in some sort, until the time of the Gothic King Athalarich. In Italy, Gaul, Spain, Britain, and even in some few places in Germany, imperial schools had been erected in all the more important cities. When we now see, therefore, at a late date, clerical schools in many of the very cities, in which imperial schools had previously flourished, we may well regard the guess hazarded by men of caution that those imperial schools had in many places been transformed into clerical schools, as a probability bordering on certainty. At any rate the new schools arose to fill the places of the old, and must have done so more easily in localities previously occupied by the old.

It has already been mentioned that a Christian school for catechumens had existed at Alexandria in the first Christian centuries. The Evangelist, John Mark, is supposed to have been the first that preached the gospel there. The founder of the catechetical school, however, was Pantenus, a philosopher converted from stoicism to Christianity. His Biblical and secular learning is celebrated by Eusebius, who says that his school was largely attended. His assistant or successor—it is uncertain which—was the talented Clemens, who educated Origen, a still greater man of true genius. Origen succeeded Clemens (he was actually teaching A. D. 213), and apart from some errors into which he was betrayed, deserves to be respected as a man of extraordinary achievement. His unwearied zeal in investigation and study made him master of the entire encyclopedic culture of his time, so that besides his theological lectures he taught logic, rhetoric, metaphysics, mathematics, astronomy, ethics and physics. [Jerome somewhere exclaims: "Who has read as much as Origen has written?"] He was followed by a series of teachers in this school, until, about the middle of the fourth century, it was gradually abolished, after existing, according to the statement of Philip Sidetes, two hundred and thirty-five years. A similar, but less important, Christian school existed at Antioch in the fourth century. A public institution of instruction in Christian theology flourished at Nisibis, in Syria, about the sixth century, according to the statement of Junilius. It is interesting to learn from Cassiodorus that Pope Agapetus (A. D. 535) had it in mind to establish a theological school at Rome, and was only prevented by the military disturbances of the time. Pope Gregory the Great also was on the point of carrying out a similar idea.

It is needless to more than briefly mention the high schools of the Arabs, which were not without their influence upon Christian culture. The Arabs had founded a great number of these after their own method in Asia, Africa, and Spain, and in them the natural sciences, medicine, mathematics and philosophy were studied and promoted with great zeal, and in a by no means unintelligent way, although much that was fantastic was mixed therewith.

The monastic, episcopal and parochial schools in the young German kingdoms not only were—as in the highest degree probable—developed out of the old imperial schools in many localities, but were also a revival of the Christian schools of the first centuries, with adaptation to the later period and its circumstances. The rule which John Cassian gave to the monasteries founded by him at the beginning of the fifth century in Italy and Gaul introduced the practice of requiring the monks to busy themselves with intellectual subjects. But of immense influence was the idea which inspired Benedict of Nursia to found a number of monasteries—beginning with that at Monte Casino—and to devise (A. D. 520) the rule which imposed upon them the express duty of mental culture. Education between the sixth and the eighth centuries flowed chiefly from these Benedictine monasteries. It was among the Benedictines that Karl the Great found the organs and tools for realizing his comprehensive plans for educating and elevating the people and the scholars of his empire. The activity of this great ruler in this matter of establishing schools and promoting education was enormous. The school system of France and Germany owes to him its first firm organization. It was he that founded and systematized their parochial, monastic, and foundation or cathedral schools (*scholæ ad plenum*); he enjoined upon the lower schools the teaching of reading, singing, reckoning and writing; in the upper schools the *Trivium*: grammar, logic and rhetoric were taught, and in their higher classes the *Quadrivium*: arithmetic, geometry, astronomy and music. Besides the upper schools at Tours, Lyons, Orleans, Metz, Osnabruck, Fulda and Paderborn, which owe to him either their foundation, or their extension and better adaption to their proper ends, he also called into existence the imperial "Palace School" (*Schola Palatina*) by inviting to his court a circle of the most distinguished scholars, a circle of which he was the center and the life, as it accompanied him in his various residences at Aix-la-chapelle, Paris, Thionville, Nymwegen, Ingelheim, etc.

Such was the first origin of the monastic, cathedral and foundation schools in the German kingdoms that arose upon the ruins of the Western Empire. At a later date there were developed out of these last, special schools for philosophy and theology and for medicine, although not for jurisprudence. Most of these special schools by and by took up the chief branches taught in the others, but in such a way that the science for which each was originally projected retained a predominant place and influence.

Paris, Bologna and Oxford are mother universities that rose

about the same date and independently of each other in the first half of the twelfth century. From them all the later universities took copy in their erection at least, even although they afterward struck into a path of development peculiar to themselves.*

Although Bulaeus and others before him sought to trace back the university of Paris to the "Palace School" of Carl the Great, yet it is impossible to do so upon safe historic ground. For it cannot be doubted that the *Schola Palatina* of the Carolingian dynasty, at whose head stood successively Alcuin, Claudius of Turin, Aldric of Sens, and (under Charles the Bald) John Scotus Erigena, ceased to exist on the overthrow of that dynasty. We can more readily regard the school erected at Paris by St. Remigius, A. D. 882 (or according to others A. D. 908), in the time of the Capets, as a starting-point, the germ of the origin of the university of Paris, inasmuch as this school again was afterward enlarged by the co-operation of the two monastic schools of St. Victor and St. Geneveive. Of the illustrious teachers who succeeded each other at Paris—Gerbert, Lambert, Drogo, Mangold, Wilhelm of Champeaux and finally Abelard—it was especially the last that by the extraordinary influence of his lofty genius and by his brilliant endowments as a teacher of philosophy and theology, which drew thither thousands of scholars from all the civilized nations of Europe, mightily helped to transform and extend the Parisian institution of learning into a true university. Contemporaneously with Abelard (between A. D. 1110 and 1120) William of Champeaux, at the instance of Hildebert, established the school in the foundation of St. Victor, whither he had withdrawn from the world. In the series of his distinguished successors who have made their mark in history, the most illustrious were Hugo (*obit* A. D. 1141) and Richard of St. Victor (*obit* A. D. 1173). The monastery of St. Victor was raised from the rank of a priory to that of an abbey, richly endowed, and provided with a remarkable library. As much attention was paid to study and instruction in the monastery as to the rigors of the canonical life. The school became equally distinguished for devoutness and for science, and was attended by secular and clerical students from almost all European countries, who sought in the quiet of this monastic retreat to rise to a deeper and more inward acquaintance with divine things. It is impossible to say exactly how many of these monastic schools existed at the commencement of the university of Paris, but there are good grounds to believe that the number was considerable.

At the end of the eleventh century, or perhaps a little later, the school of Paris had already become a university, although it is from a concordat agreed to by the four nations of the Paris school in 1206 in regard to the choice of a rector, that we first learn with certainty of the existence of the

* Salerno, indeed, has been quoted as an exception, but it must not be forgotten that this medical school, although notable for its great age and its peculiar character, yet never rose above the status of a special school, and did not serve as an example for others to take pattern by, but in fact rather disappeared from the number of the higher schools.

classification by nations, and almost at the same date in a Decretal of Innocent III. the name of *Universitas* first appears as applied to the institution.

It is, therefore, beyond all doubt that the university of Paris sprung from the ecclesiastical schools in which "the seven free arts" [*trivium et quadrivium*] and the scholastic theology were taught. Philosophy and theology were, therefore, at first the only subjects of its teaching. It was only from the year 1231 that we find among its teachers special Doctors of Theology, of Medicine, and of Canon Law, by which distinctions the various principal subjects of instruction are indicated, although separate faculties did not arise until the year 1260. Previous to that date only the classification by nations was recognized, although for sometime previously law (the canon law at least) and medicine had been taught, as well as philosophy and theology. The separate faculties were, therefore, all thus early embraced in the general faculty, the *Facultas Artium*, and it only needed a collision of some sort to divide them in fact into separate faculties. The separation which did exist from A. D. 1260-70, although it was associated with tumult and confusion, must be regarded as an essentially progressive step in the internal organization of the university. But it was the German universities which were established after the model of Paris, and which either kept the division into nations in the back ground or entirely rejected it, that were the first to avail themselves perfectly of the advantages of that organization.

The university of Paris deserves to be mentioned with the highest distinction on account of its historical origin, its rapid progress and its extraordinary influence. No other can compare with it in respect to the extent and the degree of its celebrity throughout almost all Europe, or its historical importance and the influence it exerted on the history of Church and State, science and universal culture. The faculty of theology in particular was treated with extraordinary respect, and up to the middle of the seventeenth century its utterances had great weight in all quarters. Its deputies sat (A. D. 1408) in the Council of Pisa; they were invited by the Pope, A. D. 1423, to seats in a general council; they sent their doctors to the Council of Trent (A. D. 1542-62). Paris was the mother of a large number of European universities.

Almost contemporaneously with the great change in the higher school at Paris the law school at Bologna in Italy was raised to the rank of a university. History points to the beginnings of the law-schools at Ravenna and at Bologna itself as premonitory of this step. According to all writers of that age the Irnerius whom Odofredus mentions appears to have been the founder of these schools; he had been a teacher of "the free arts" when law-books were brought to Bologna, and had thereupon studied jurisprudence without a teacher, and then came forward as a teacher of the subject. Later still Irnerius is seen engaged in public affairs (A. D. 1113-6). From A. D. 1116 to 1118 we find him continually in attendance upon the Emperor Henry V., and frequently employed by him in important affairs of State. These accounts prove that the law-school of Bologna, unlike the school at Paris, did not spring out of any ecclesiastical institution such as a monastic, or an episcopal or a cathedral

school, but was the entirely free conception and production of a gifted, cultivated and scholarly man, who acted under no authority either ecclesiastical or secular, but knew how to secure for his purposes other able men as his associates. His undertaking was the surer of succeeding in that age and land with the aid of so much intellectual power, inasmuch as the practical need of a thorough knowledge of law had already made itself felt.

The contrasts in the form, the constitution and the history of these two model universities of Paris and Bologna, is to be traced to the difference in their origin, in the special science which originally furnished the foundation in each locality, taken in connection with the entire condition of the civil and ecclesiastical life of that era. These contrasts reappear in universities constructed after these models. The common idea of organization which underlays all mediæval universities was that of a close, independent, legalized corporation of masters, assistants and scholars, furnished with the number of officers of higher and lower degree necessary for the cultivation of the arts and sciences, and endowed with the prerogative of conferring the degrees of fellowship and mastership in their various corporations, as honors the highest known to science. At Paris this idea embodied itself in a more aristocratic shape; that at Bologna was more democratic. In the former the authorized corporation was formed out of the united body of teachers (the *universitas magistrorum*) to whose authority the students were subject. In the latter the authorized corporation was the united body of scholars (*universitas scholarium*) who elected both their presiding officers and their teachers. Originally the division into nations was common to both universities, although in somewhat different ways. But the university of Paris advanced very soon from the external and accidental principle of a national classification to the essential, objective principles of a scientific classification, and showed an emphatic and ever-increasing preference for the latter, while the university of Bologna did not accept the classification by faculties until a later period, when the other method through long continuance had secured to itself a predominance which it was able to maintain. Although Paris in its first ages was but a special school for philosophy and scholastic theology, although the classification by nations took shape from causes easily comprehended, at the very commencement of its new career, or at least by A. D. 1170 (the number of "the nations" was fixed at four in 1206), and although each nation had all the rights of an independent body, with proctors at its head, yet the university was in itself a closely united whole, since the nations exercised the legislative and executive power in joint session, and the proctors took charge of the interests of the whole body, and chose the rector (whose standing counselors they were), while at a later date the nomination of the rector was made by "electors." On the contrary, we see at Bologna, where originally no other science than that of law was taught, two different universities divided according to the nativity of the scholars, that of the ultramontanes and that of the cismontanes. As still later, important teachers of the "free arts" came forward, they formed with their scholars a third university of their own, with a rector of their own, and with the title of "University of Arts." Finally Pope Innocent VI. (A. D. 1362) founded a

theological university also, after the model of Paris, except that the theological scholars were personally regarded as attached to the University of Arts, since they had no civil rights in their own university in which the professors formed the corporation. The two juristic universities, however, formed one whole; the ultramontane contained eighteen, and the other seventeen nations, each at first under its own rector, but from 1514 they were sometimes under a common rector, and sometimes separate again, until 1552 the choice of a common rector for both became the fixed rule. As early as the thirteenth century there were at Bologna two colleges or faculties of Doctors of Law: one for the canon, the other for the civil law; then arose medical, philosophical and theological colleges.

At the end of the eleventh century, or perhaps—according to the most recent investigations—a little later, the University of Oxford was developed out of an actual scholastic institution which may be traced back to the times of Alfred, though not without some breaks in the chain of historic continuity. In the same way the institution opened for students at Cambridge in the twelfth century, took rank as a university in the beginning of the thirteenth (A. D. 1209). These two intellectual eyes of the English kingdom, as they used to be called, were represented until quite recently as founded and erected after the model of Paris, on occasion of two immigrations—from Paris to Oxford in A. D. 1229, and from Oxford to Cambridge, A. D. 1231. The latest investigations have not given confirmation to this supposition, but rather established the fact, that these two universities were contemporary in their origin with those of Paris and Bologna, but entirely independent of them, a view which is further confirmed by the originality of their organization.

In Oxford we find that the University was divided into but two nations, the Northern and the Southern English, and no mention is made of foreign nations. Oxford had no rector, but instead an entirely peculiar place was occupied by her chancellor. The usage of students living together *in culis et hospitibus*, which at a very early date grew into real colleges, is here original and native to the soil, whereas in Paris it is of later origin (the Sorbonne, A. D. 1250). Each nation had its proctor, who, in co-operation with a proctor appointed by the Bishop of Lincoln, named a chancellor to represent the interests of the university. The chancellor soon came to be regarded as the head of the university, since he gradually gave up his position as one outside of university obligations and restrictions, and took his place within the *corpus scholasticum*.

At Cambridge also the university grew out of a scholastic school, and must be regarded as transformed into a university A. D. 1209, chiefly through the influence of an immigration from Oxford.

Although in the English universities the great outlines of distinction between the different groups of the sciences were recognized (as in the organization of the four faculties at Paris, A. D. 1260-70), yet in spite of numerous efforts in that direction, the different faculties never succeeded in erecting themselves into close corporations, separate from the university itself and in every respect independent of it. These universities held fast to the principle: *Uni-*

veritas est fundata in artibus. The arts-men, therefore, formed not merely an integral part of the university, but they were and still continue to be the university itself. Instead of the faculties, it was much rather the colleges that grew in place and influence. These and their governing bodies occupy in the corporate life of the university a place that fell to the faculties, their deans and professors, both in Paris and still more in most of the later universities.

It is noteworthy enough that Bologna was the example after which, not only the universities of Italy, but also those of Spain and—strangest of all—even those of France were organized, while Paris was the prototype of the first universities of Germany. The classification according to faculties and sciences, which was first developed at Paris out of older national classification, was taken by the German Universities as the starting-point of their internal organization; and as they treated the insoluble union of the entire body of the sciences as inseparable from the very being of a university, they insured for themselves a development, a position, an importance and an influence upon the entire course of the nation's historical culture, and still further upon that of the entire educated world, which on the whole surpasses the record of the universities of the rest of Europe. The Italian and the French, as also the Spanish universities, could not entirely free themselves from their original character as special schools, or always showed a disposition to relapse into the form of those special schools. The English universities indeed very decidedly held fast to academic unity, but at the sacrifice of the richer and freer development of the separate faculties, so that they also, though for a contrary reason, never quite rose above the status of the special school to the idea of the *Universitas Literarum*, to wit, the fully developed totality of the sciences. The German universities alone realized the idea of the *Universitas Literarum* in the most complete and manifold way in which it ever made its appearance. The German spirit from the first apprehended the idea of the University, as that of an institution, whose soul's life must be the inner community and the mutual connection of the whole body of the sciences. It resisted with the profoundest antagonism alike the extreme of reducing the separate faculties and their groups of the sciences to a state of bondage to the universal sciences—as in the English universities—and the other extreme of allowing the separate faculties to fall away from academic unity to the formation of mere special schools, as in the universities of Italy, France

and Spain. This depth of insight shown by the German mind is the most complete evidence of its intuitive sense of the need of mutual reaction between the speculative and the experimental elements of science, and also of the special call of this nation to realize the idea of philosophy, namely, to continually infuse ideas, and in the last place the one highest idea, into the positive and experimental elements of science—a body of material ever increasing in richness.

The first German universities, Prague (A. D. 1348) and Vienna (A. D. 1365) originally contained at once a classification by nations and a classification by faculties, and differed from Paris also in that the philosophic faculty had a dean at their head, while the same faculty at Paris had none. At first affairs of common interest were decided not in and by the faculties, but by the nations, a majority of votes being absolute, an arrangement which unhappily gave three votes to the French at Paris and the same to the Bohemians at Prague.

So again the rector was chosen at Paris—even after the classification by faculties—as also at Prague, by the proctors, and any robed Master of Arts, *i. e.*, any professor of the philosophic faculty, was eligible to the office, while at Vienna, from the first, or at least from A. D. 1384, any member of the four faculties was eligible. The classification by nations exerted more influence and continued longer at Leipsic than any other German university; it lasted there in a very limited form until the reform introduced in 1830. In Prague and Vienna the national classification was thrust into the background, and universities founded at a later period took warning from the manifold friction which the arrangement had occasioned in the older universities, often bringing them almost to dissolution; they therefore gave the go-by to the classification by nations, and expressly based their organization upon a classification by faculties. Heidelberg did this as early as A. D. 1336; Erfurt in 1392; Würzburg in 1403; and again when reestablished in 1582; Rostock in 1410; Greifswalde in 1456; Freiburg in 1457–60; Basel in 1459; Treves in 1472; Ingolstadt in 1472; Tübingen in 1477; Mainz in 1477, etc.

Passing by minor differences of organization we see that the constitution of most of the later universities was essentially this: the whole legislative and judicial power, the choice of rulers, members and officials, and finally of the rector, lay in the collective faculties; the great council consisted of the ordinary professors of all the faculties under the presidency of the rector—the lesser council of the deans of the four faculties, with whom were associated, in some universities, assessors from all the faculties, or at least from the law faculty.

When once the first universities had been founded in Germany, their number was increased very remarkably through the zeal and favor of many German princes. Five were established in the fourteenth century, ten in the fifteenth, eleven in the sixteenth, twelve in the seventeenth, six in the eighteenth, and thus far five in the nineteenth. Some of these were afterward abolished or transplanted, or absorbed in others, or reduced to the rank of lyceums. Of

forty-nine universities which arose at one time or another down to the present day, Germany still possesses twenty-four, not counting, of course, lyceums and academies.

The course of development of universities in Europe has everywhere gone hand in hand with the progress of education in Europe. Although, therefore, the deficiencies and faults of the various periods has been always reflected in the universities, yet, on the other hand, it must in justice be said that all the important impulses to religious, artistic, scientific, legal and constitutional progress, have either proceeded from the universities or, at least, have found zealous promoters in that quarter.

Taking a still closer look at the universities, we find them to be especially the crown of all the national institutions for instruction. If we look at them merely as scientific associations, they rank below the academies of the sciences. The universities, therefore, take a middle place between the gymnasia and the academies. It is the business of the gymnasia to educate individuals up to the point of receptivity and capacity for free, active, independent cultivation of the sciences. They are, as their name implies, schools for mental gymnastics, and they have, therefore, to employ, to exercise and to strengthen the powers of the mind in all essential directions, so that it may possess such a readiness and fluency in regard to what it knows, and such a capacity to express its knowledge clearly and distinctly in correct language, and to apply it with ease, that the man shall be ripe to grasp the essence of the sciences, and in pursuing his independent studies to attain to the most profound knowledge of any subject. The academies on the other hand, are confessedly designed to be associations of the master minds in science, who shall devote their powers to its advancement in its various branches, and to lead other competent men to pursue the same course. Especially are they free from any connection with special utilitarian aims in the State, and their members being secured from want and the ordinary necessities of life, they represent the idea of the pursuit of science purely and simply for its own sake. The universities, on the other hand, are indeed in one respect associations of master minds in science, and as the very name of master implies a call to the cultivation of science, they are certainly called upon to co-operate in the work, and in so far of science, is to be treated as something of in

dependent worth, something whose dignity does not depend upon any immediate usefulness. Every university professor, worthy of the name, rightfully can and must possess the noble disposition to love and foster the sciences not chiefly for any profit or advantage to be derived from them, but rather to stand fast in his loyalty to them with all his heart and soul and mind, even when they are connected with no practical advantage whatever.

This exalted character of science, its possessing intrinsic value and its absolute and unlimited dignity, is however in no whit detracted from by its entering into relations with practical life, and furnishing the most serviceable means to realize practical ends. As well might man assert that God gave up something of His absoluteness in becoming the creator of the universe, and in His infinite love condescended, took the place of the means to His own creatures.

This relation of practical life to the essential ends of human existence is not an external accident, but a necessary consequence of the very nature of science. So far is it from dishonoring itself thereby, that much rather its dignity as well as its power are first rightly revealed by the very fact that it teaches men to judge, measure, arrange and transform the external reality according to its own high and irresistible demands. For science presses forward to the origin of all things, all arrangements, all relations, and since it apprehends that in her last and highest aims, she reveals herself as the power that at once supplies the basis, guides the efforts and completes the edifice of all human effort. Bacon says: *Scientia et potentia in idem coincidunt*; and again: *Hominis imperium in res in solis artibus et scientis potitur*. To promote and cultivate all genuine science is, therefore, to advance all right practices; and universities are therefore practical institutions just so far as they are truly scientific. Their arrangements are therefore so much the more perfect in so far as they are fitted to promote the genuine scientific spirit; the more defective in so far as they show themselves less favorable to that spirit. The governments of the various States should, by all means, cherish therefore the most lively interest in the health of the university life, if only because from them they receive their officials of all sorts; yet they would take the very worst of possible means to secure men of practical capacity and gifts, if they were to degrade the universi-

ties to the rank of mere institutions for the convenience of training officials for Church and State. The universities would in the same degree furnish incompetent servants to Church and State in so far as they were hindered from cherishing and developing a living scientific spirit. All that can be said, therefore, against science really applies, not to science itself, but to the sham science which is mistaken for it, against the one-sidedness, the disfiguration and falsification of true science. Such accusations, too, are of no worth or consequence except when they are brought by the true representatives of science and in its service, with a view to its larger liberty and honor. For sham science can only be resisted and overcome by that which is true and genuine, never by ignorance.

This two-fold aim of the university, to promote science for its own sake, and also for the sake of developing the practical capacities of the student, is in reality but a single aim, inasmuch as the latter is included in the former, and must be seen to have failed in so far as it has not attained to the former. By far the majority of students devote themselves afterward to what is called practical life, and comparatively a small number to the theoretical life of the scholar, which in one point of view is really as worthy of being called practical as is the other. The university, therefore, has to make not only scholars, in so far as this word means men who will make science the business of their lives, but far more especially to send out men whose work will be to realize the ideas and truths of science in actual life. Do these last (whom Kant calls the ——— of learning), even although they do not make science as such the business of their life need to be any less thoroughly grounded in science, a thing that must be known thoroughly or not at all. How can they transfer the methods and results of science into practical life, if they have not made themselves masters of these? If to the scholar, strictly so called, it belongs to acquire a more exhaustive and detailed knowledge, and one that shall reach to the remotest corners of the province of science, yet the universities, in view of their thorough grasp of the leading principles of a scientific course, have the strongest claims upon those who are to engage in practical life, as well as upon the other class of students, to say nothing of the dignity of science and the practical discipline which its study supplies. But no one ever be-

came well grounded in knowledge who did not first rise to a proper conception of its immense dignity. Seek first *this* kingdom of heaven, this knowledge, and all things else will be added.

THE LAWS AS TO THE WORK OF CHILDREN IN MANUFACTORIES IN EUROPE.

BY EUGENE D'EICHTHAL.

Translated from the Revue des Deux Mondes, by O. H. K.

FOR the last seventy years in England and thirty years in France, the State has regulated by law the work of children in the manufactories. Neither objections as to the principle nor difficulties of execution have at all prevailed against the opinions, which have constantly sustained the justice of legislative intervention, and called for efficacious measures for the protection of the young workers. The State, in fact, has the double duty of preserving the interests of society and of succoring minors incapable of defending their threatened healths and lives. It is the duty of society to watch over the lot of rising generations. How can she allow those who, in time, will constitute her strength and wealth, to be mowed down before their time, worn out by excessive fatigue? How is it that she will not preserve them against the selfishness of those who will cut down the young trees to get their fruit?

The anxiety felt on the subject is by no means excessive. The statistics of military recruiting inform us, that of 325,000 young men conscripted during one of the late years, 109,000 were discharged for want of stature, diseased spine or constitutional weakness. What, in this diseased and feeble contingent, are the respective proportions furnished by the agricultural and the manufacturing districts? To every 10,000 conscripts fit for service in ten agricultural departments, there were 4,029 rejected, whereas in ten manufacturing departments the number of rejected was 9,930. In the departments of the Marne, Seine-Inferieure and Eure, districts exclusively devoted to manufactures, the proportion has risen as high as 14,451 rejected to 10,000 thought fit for service.

Such facts touch too closely the political and social future of

the country, to be passed over by the State ; but how is the interference of the State to be governed ? It is a question productive of very delicate problems : Paternal authority, family interests, freedom of work, and the necessities of competition must all be consulted. Should we establish a uniform rule for all parts of the country, and for all branches of production, without taking account of the differences of climate, the habits of the people, the variable conditions of different branches of business ? Is it not an aggravation of the evil to diminish the resources of those poor families to whom the small wages of their children is indispensable ? Must we not, however, make our calculations from a higher and further point of view ? By developing by education the intelligence and strength of the young workers, by implanting in them moral thoughts and habits, their productive power is increased : Will not the temporary sacrifices made for instruction be amply compensated by a more considerable return ? Experience has proved that, even for adult workers, the quantity produced is not always proportional to the number of hours spent in working, and frequently, within certain limits, by shortening the working day, the amount has been increased, and especially the quality of the work improved. A machine acts only proportionally to the force applied to it ; but the child does more, it multiplies the force transmitted to it ; the sap it draws up in education may make of a weak and useless creature, a powerful being, well balanced, healthy in body and mind. How then can it be that the State will not watch over the development and health of the young workers which fill the mills in our cities and country, from whom are recruited the army and the ranks of our voters ?

The invasion of the mills and workshops by women and children is an event of comparatively recent date, in fact it has arisen since the immense multiplication of steam-machinery, which allows in almost everything the replacing of physical force by tools moved mechanically, which a feeble arm can guide. During the middle ages, and up to the 17th century, the number of children employed in manual labor was very inconsiderable. Manufacturing increased slowly. Limited to a small production it was divided into small shops, composed of a master, two or three journeymen, and as many apprentices. The number of the latter was rigorously fixed by the laws of the corporation, which in many trades al-

lowed but two, and in others three. The rules also fixed a necessary time of apprenticeship, almost always too long, varying from three and four to eight, ten and even twelve years, and the apprentice had always to pay a sum of money on entering his apprenticeship. The doors of the trade corporations were carefully guarded, and as no one could establish himself, outside of the fortress, nor work at the trade without passing the prescribed conditions, the ranks of the industrial army were rarely increased.

In the 17th century, the manufactures, developing under the influence of Colbert, began employing a certain number of children. The manufactories directly founded or encouraged by the State took many apprentices. Colbert brought into France skilled workmen from all countries, and in helping them imposed on them the obligation to take young workers to whom to teach the secrets of their work. When Colbert aided by several privileges the establishment of the manufacture of tapestry at Beauvais, he demanded that they in return should take fifty apprentices.* The master glass-workers he brought from Venice to establish a glass works had to accept a similar charge. At Aubusson, special privileges were given to those who had served three years' apprenticeship and four years as journeymen. A large number of young girls went into the making of fine lace. In Bourges alone 900 came to learn the new processes; entire districts devoted themselves to this kind of work. The government of Louis XIV. encouraged families in this course, and Colbert exempted from taxation those who had three children employed in manufactures.

The introduction of children into manufactories did not become general, however, until the restoration and the monarchy of July. Up to that time, the larger number worked in the country in the houses of their parents, or in little shops. The workers were at that time straitened by poverty, and by conditions at least as hard as those of the manufactories; but the division of industry prevented the misery of the working classes being as visible as it is now by reason of the concentration. When, during the first thirty years of this century, the great establishments took their first prodigious flight, the spectacle of the new conditions of industry was at once wonderful and frightful. Production ad-

*Levasseur, "*Histoire des classes ouvrières avant*, 1789, vol. ii., book 6.

vanced by giant steps, but seemed in her progress to swallow up whole generations, which, instead of profiting by the progress, became its victims. Near these untiring engines, which could work night and day forever, were seen chained thousands of children and women, perishing from excessive work, slaves to these iron-muscle masters, who knew neither weariness nor rest. Should these feeble ones be left to themselves and without help, to fall in the hot fight of competition? For adult workers, the larger part of well wishers would not hesitate; liberty, notwithstanding its dangers, seemed better than legislative interference; it was the part of customs and the individual will to correct the abuses. For the women, and especially for the children, the question was a graver one. These are the objections arising from the necessity for respecting paternal authority and the freedom of labor, but these should both have limits. The duty of parents was above all to watch over the health of their children; and as to the industrial interest, it must not overrule the social interests to the entire sacrifice of the latter.

It is a remarkable fact, that it is in the country which has stood firmest for economic liberty, that these truths were first perceived, and an effort was made to bridle the excessive employment of children. Seventy years ago the country of Adam Smith violated openly upon this point the *let alone* principle, which she has applied consistently in so many other matters. A long succession of bills passed against a most obstinate resistance proves that the majority understood the necessity of distinguishing in modern workers two grand classes—adults and minors; the first of which should be left to the strife of competition, to all chances of good or bad fortune, leaving them the greatest facilities of attack and defense by means of individual freedom or association—but that the second class (*i. e.*, women and children) must be assured by legislative enactment against oppression. The first step in this direction dates at the beginning of this century. In 1796, Drs. Athin and Perceval raised the cry of alarm at the extent and gravity of the evil which arose from the progress of the large manufactories. In 1802, Sir Robert Peel, father of the future minister, member of Parliament, and proprietor of a cotton mill, proposed a law, which was passed and which had for its object “to guarantee and defend the health and morality of apprentices of

both sexes." The bill forbade the labor of children at night, limited their day to twelve hours, and clothed the justices of the peace with power to watch over the execution of its provisions. This law proved inefficacious, for it left too many loopholes of escape; by naming apprentices, it did not reach the numerous factories which employed children without a contract of apprenticeship; and besides this a large number of manufacturers were justices of the peace, so the infractions of the law remained unpunished. In 1815, under a new proposition of Sir Robert Peel, Parliament ordered a commission which lasted four years. Grave facts were noticed. A pamphlet of the time, written by two Manchester deputies, contained startling revelations. The children were employed fourteen hours a day, from 6 A. M., to 8. P. M., winter and summer; they had to walk in the narrow space around their machines more than twenty miles every day; the heat of the factories was intense; the atmosphere they breathed was deleterious, and engendered numerous diseases; of 269 children examined by a physician, 116 were sickly and had their chests affected. In conclusion, the two deputies demanded that the law should limit the day's work of children to thirteen hours (including two hours for meals), and on Saturday to eight and a half hours. Wilberforce demanded in vain that a distinction should be made between young children and those which were older, and that a still shorter day should be adopted for the former. The law of 1818 fixed the maximum at twelve hours a day for children under sixteen years of age. This principle remained in force until 1833, and the authors of the first proposition of 1802, and among them Sir Robert Peel, were the foremost in defending the day of twelve hours. The only concession obtained in 1825 was the limitation of nine hours as the work day on Saturday.

The Act of 1833 is still in force among our neighbors, though many modifications in small matters have been added to it. This bill was proposed by Lord Ashley, afterward Earl of Shaftesbury and passed, aided by numerous petitions, having more than 60,000 signatures. This Act establishes a distinction between children and youth, and limits the day's work to eight hours, for those from nine to thirteen, and to eleven and a half hours, for those from thirteen to eighteen. Women also were included in these provisions. School instruction is also made obligatory on all

children under the age of fourteen, and attendance at school must be attested by a weekly certificate. The law of 1844, proposed by Sir James Graham, was a new step in advance; children under thirteen years were not allowed to work more than six and a half hours a day, either morning or afternoon, and three hours of school were necessary; children under eight years could not be employed at all.

These severe measures would probably have remained a dead letter, without an innovation, which is the salient point of the Acts of 1833 and 1844—the creation of salaried inspectors by the government, charged with the execution of the regulations. Since that time the rules have been continually perfected. Obligated at first to confine themselves to the big factories, the inspectors have seen each year open to them a further domain. Little by little almost the whole range of manufactories has been reduced to these rules. The small establishments, which escaped the laws of 1844, '50, '53 and '60, have been recently reached, under the name of workshops, by an Act of 1867, which gave their surveillance to the local authorities; but they have not obtained such satisfactory results as the government inspectors, who were last year given charge of the workshops also.

In Prussia, too, several successive laws have been passed for the regulation of the work of children in the factories: the first was in 1837, and a new one in 1853, and recently the industrial code of the North German Confederation has definitely regulated the matter (1869). The late legislation goes even further than that of England; it decrees that children under twelve years cannot be regularly employed in mills; up to fourteen years, they cannot work more than six hours, and must attend school three hours daily; from fourteen to sixteen years, the day's work cannot be more than ten hours; the working hours must be between 5½ A. M. and 8½ P. M.; a rest of a half-hour in the morning, and of an hour in the afternoon are obligatory, and during this time the children must take exercise in the open air; and the police is everywhere charged with the execution of the law.

The other principal countries of Europe have adopted diverse rules; but, in all, the law protects and regulates the work of children. It is so in Austria, in the smaller States of Germany, in Sweden, in Switzerland, where the age of admission to certain

trades is limited to thirteen and even fourteen years, and in Belgium, where the work of children between ten and eighteen years is regulated by law.

A MANLY VIRTUE.

THE recent "temperance movement" in Philadelphia was the occasion of raising an old question which bears very directly upon public morals. In addition to a pretty general agitation of the question of local prohibition, a few of the more zealous advocates of "the temperance cause" had been visiting stores and purchasing liquor on Sunday—a day on which its sale is an offense against the laws of the Commonwealth. The liquor was purchased with the presumption of good faith on the part of the buyers, but the sellers were speedily prosecuted and heavily fined—so heavily in one case that the establishment was happily closed forever. The feeling which condemned the proceeding of these few zealots for the law was wide-spread, instantaneous, and all but universal. A few of their friends held a meeting to endorse them, in the rooms of the Young Men's Christian Association, but the Association itself took the first opportunity to repudiate officially and emphatically all connection with their proceedings, and to contradict a popular impression that it was responsible. Equally strong has been the condemnation expressed publicly or privately by most of our city clergy. Popular indignation among some of the baser sort took the form of an attempt to lynch one of the spies.

How far is this indignation just and laudable? It cannot be alleged that no good has been or can be accomplished by this spying; on the contrary, we owe to these zealots the suppression of one of the vilest and most scandalous establishments in the city. Neither could they possibly be charged with sneaking or cowardice; they took their lives in their hands in this work, exposing themselves to verbal abuse and nearly every form of personal violence with all the recklessness of true fanatics; yet their services earned no thanks, their courage no respect.

We believe that the popular instinct that condemned their acts was in so far thoroughly right; wrong only in extending to hatred

of their persons. We are convinced that any attempt to weaken that condemnation, by pleading either their courage and honesty or their success in some instances, would be most thoroughly immoral—a blow at one of the deepest foundations of public morality. This hatred of spying is but one phase of the hatred of lies, which is one of the loftiest and the deepest characteristics of the Germanic race. It is our hereditary tradition to hate spying—not as dangerous, but as vile; for every spy is a liar in act, if not in word; he does evil that good may come of it. In a state of peace the act is wholly unjustifiable. In war it is allowable in two connections: 1. As against the public enemy; this being one of the recognized weapons of the struggle. But even in war all forms of lying are not held justifiable. A ship-of-war may not fire under the concealment of a false flag. Expressed confidence may not, in any case, be repaid by deceit. Even the spy, although not necessarily dishonored socially by his occupation, is put to death without any marks of military respect. 2. Against disloyal subjects at home, or those who are *presumed* on good grounds to be *dangerously* hostile to their lawful sovereign. Thus during the great struggle between England and the first Napoleon, when Gallican sympathies were known to pervade certain quarters of English society, every suspected person was watched. Coleridge and Wordsworth, at that time rusticated in the south of England, were thus attended by a government agent, who used to listen to their colloquies from behind a bank. He was sure at first that they both deserved and suspected his attentions, as they often spoke of “spy nose” (his nose was a prominent feature); but “by putting this and that together” he found out that it was only an old chap [Spinosa] that lived a long time ago beyond the seas and wrote a book; for his own part he believed the two gentlemen were a harmless pair of “born naturals.”

Our recent civil war was held to justify similar measures toward Southern sympathizers in the North. Elegantly dressed and attractive “ladies,” wearing the U. S. badge of their office concealed under their cloaks and shawls, rode in our trains and steamboats to watch and, possibly, to elicit the confidence of travelers whose gallantry exceeded their loyalty. It is said that the opening of suspected letters was, during the war, reduced to a science, and formed a distinct branch of our postal service.*

*We do not state these facts upon the authority of any who were or now are hostile to the war and its objects, or to the party in power. Some of them we know directly and officially.

The right or wrong of such measures is a complex question, and the extremity of the government's need of them must be a large element in any just decision of it.

But in ordinary times, when men are at peace with each other, we regard truth as of the very essence of that peace. There is among us a clear understanding that men shall speak the truth to each other, in politics, business and all other departments of life. Truth is what is looked for and expected between man and man in all Germanic communities. If we are deceived by lying we not merely feel (nor perhaps at all) mortified at our own credulity; our chief emotion is indignation at the cheat practiced upon us.

We have specified these things, although they are so familiar to us that we hardly ever give them a distinct thought, for the sake of the contrast which they present to the state of things among the Latin nations—Italy, Spain, and, in a less degree, France.* In general it may be justly said that in those countries society is held together by other bonds than those of public good understanding. Deceit and treachery may be as severely punished, but they are not as bitterly resented, nor as profoundly despised as in more northern nations. "To give the lie" is never so utter an insult; it sometimes is laughed off as a jest. Every Latin government uses spies and opens letters without a morsel of hesitation in times of the profoundest peace, and with no danger of exciting popular indignation. The people take such practices as a matter of course; they expect them and are on their guard accordingly. In Rome it is nearly impossible to carry on a suit at law that requires the common people to serve as witnesses. They will deny all knowledge of what happened under their very eyes and at the very instant. "You see this pig here, my friend, that I found in

*In all the Latin nations there is an infusion of German blood; a German tribe gave to each of these peoples their first shape as Christian nations after the overthrow of the Western Empire—the Lombards, Goths and Normans in Italy, the Goths and Visigoths in Spain, and the Franks and Normans in France. The German element has given much of their vitality to all of these nations, but the predominant race in each—the substratum of society—was not German, and the social character of these compound peoples, like their language, is Latin or Celto-classic. In France the German element was larger and more influential than in the others, and has given the country its name. France is the point of transition from the Celtic to the German world, as well as the "warden" of the Celtic "marches."

this scoundrel's possession?" "Pig? what pig? where's the pig!" says the astute Roman, with a blank, idiotic stare, although the animal is squealing under his very nose. *Caveat emptor* is a maxim that we imported from Italy, and a very convenient one, as it requires the buyer to remove all doubt by reducing the terms of his contract to writing. The Italian means much more by it; it is a maxim of his morality. Instead of being a transaction of peace, a purchase is a war-measure on the Mediterranean. The buyer must guard himself at every point, for he is fair game for the seller. Even in Paris American buyers are obliged to preserve carefully every receipted bill, as many of the finest establishments will have no scruples about demanding a second payment, in case their customers return to the city. In more than one instance the double payment was exacted by taking the careless buyer before a magistrate.

Only in a Latin country could a wise, sober, public-spirited man have written *Il Principe*, a manual of government in which political treachery and fraud are reduced to a complete system. That book was approved and patronized by a head of the Church; it called forth no protest in any quarter of Italian society. An Englishman was the first to denounce its utter immorality.

How can society be kept from falling to pieces in such a state of things? It has two other bonds of unity, viz., the strong social instinct and the reverence for authority which characterize the Latin races. Something of the Oriental reverence for the State and for society still clings to this Celtic race. It can never be brought to look upon governments as a mere utilitarian contrivance to accomplish certain ends, and national unity as an affair of geography. These things are sacred to him; if he believes in God, he associates that belief with them; if not, these themselves are his *fetish*.

But the Germanic peoples have not these two unifying impulses in any great measure, and society rests far more upon mutual confidence. We believe, as a matter of course, that our neighbors speak the truth; we can trust each other. Even business life rests, in the last resort, upon mutual confidence, for the machinery of safeguards and guarantees covers but a very small part of our business transactions. We speak of distrusting a man with an emphasis and a pertinence that of itself expresses our confidence

in his neighbors. There is a public understanding that every man shall speak the truth, and be believed in what he affirms until the contrary is proved.

Luther saw this great distinction between the morality of the two races with all the clearness of genius. Herder quotes him as saying:

"We Germans have no repute for any other virtue so high and, I believe, hitherto so well deserved, as for being faithful, truthful and staunch folk, whose yea is yea and whose nay is nay, as is shown by a host of histories and books. We Germans have still a spark (may God keep it alive and blow it into a flame) of this old virtue, namely, that we are still ashamed and will not gladly be called liars, nor laugh at it like the Italians or Greeks, or make a jest of it. And although Italian and Greek fashions are making inroads on us, yet we are still so far unchanged that there is no more serious or more shameful word of reproach among us than to call or be called a liar. And I verily think (if I may call it thinking) that there is no more abusive reproach upon earth than this of lying and unfaithfulness; for there is none than so breaks up all fellowship among men. For lying and unfaithfulness begin the division of men at the inmost heart, and that once effected, hand parts from hand; and when that happens what can men do or make? Hence come the divisions, the party-work and the unhappiness of Italy. When truthfulness and good faith are gone, then must all government come to an end also. God help us Germans."

His words suggest the question, how far was this Germanic virtue a root of the Reformation which is associated with his name, and whose boundaries generally coincide with those of the Germanic race? A full discussion of this might lead us into subjects unsuited for these pages. But without touching on the main question of the absolute right or wrong of the Lutheran Reformation, we may safely say that he owed very much of his influence to the popular feeling that he represented—their love of the down-right truth.* The Church of Rome has always acted on the apostolic maxim, "Let all things be done to the use of edifying." She has put edification and charity first—truth second. The holy

* Father Newman gives us this *rationale* of the English Reformation: "They preferred the heathen virtues of their original nature to the robe of grace which God had given; they fell back upon their worldly integrity, honor, energy, prudence and perseverance." *Lectures on the present position of Catholics in England.* 1852.

house of Loretto, for instance, is not regarded as the real residence of the Virgin by Catholic scholars of any pretensions. "But, then," it is urged, "multitudes of the faithful devoutly believe that it was her abode; they would be profoundly scandalized by closing the chapel at Loretto, or at any act or word that would seem to deny its peculiar sanctity. As they kneel there, they have the great historical and saving facts of the life of the Son of Mary impressed upon them as nowhere else, except, perhaps, at the far-distant Holy Sepulcher. Perhaps their souls may be kept from snares and temptations by the memory of the hour that they spent there. How slight the importance of any question of fact in comparison with the salvation of a single soul." So they might reason.

The Protestant method is just the reverse. It is *truth first and edification afterwards*. This, and not any right of private judgment, is the root principle of the Reformation.

Luther was largely occupied in assailing what even Roman Catholic historians confess to have been real abuses—edifying shams. Many of these were swept out of the Church by the counter-reformation begun by Loyola. But the root principle of the Church—*edification first and truth afterwards*—remains just the same. It has much to recommend it, especially to feminine and timid natures. It cuts many a puzzling knot, and avoids many a perplexing difficulty. There is no lack of instances in which Protestants have had recourse to it in all ages since Luther. Thousands of them act on it all their lives long, without thinking that they would be logical in making their peace with Rome. Especially is it urged as a reason for confining the range of investigation and discussion in theology and the adjacent provinces of knowledge. For instance, we are told that "the revision of our English Bible is a grave mistake. It contains a great many errors, to be sure—some of them grave, most of them to be regretted. But to change them would be to unsettle the popular confidence in the whole book. What will the people think when they are told that the work that they had been taught to regard as the Word of God contained all these mistakes? Above all, what an argument for the Roman Catholic, when our Protestant Bible, our infallible authority, is confessed to be in so large a measure unworthy of confidence." Yet the present version was

made in spite of the existence of a previously authorized version, and in a time when the Protestant controversy with Rome was far hotter than at present. It was made because men still believed in the Protestant principle, and held it to be their duty to give the Scriptures to the people in the most accurate version attainable.

So again it is urged against the free investigation of scriptural and theological questions, that whatever truth may be reached men's minds will be dangerously unsettled by these inquiries. Many of those whom Bishop Colenso's arithmetic forced to give up the historic character of the Pentateuch never spoke out their belief, and heartily hate Colenso for bringing them to it. They think it edifying to teach the plenary inspiration and unqualified truth of the whole Bible, or at least to leave the popular belief uncontradicted, lest the faithful should be scandalized. For our part, we do not accept the Bishop's conclusions, but we respect the Protestant honesty with which he spoke out his real belief, even while we think him to be singularly unfitted by temperament and by training for such studies. Let us have the truth, the whole truth, and nothing but the truth on these subjects, or let us go back to the Church that our fathers came out from, since we have given up the principle of their secession. It is of no use to draw lines of distinction, and claim that this or that province is sacred from discussion. The Reformation committed Protestants to a principle which throws open all subjects for examination and research.

On the other hand let us not try to draw dividing lines of an other kind, and seek to make this root virtue of our race less than universal in any department of life. The love of truth like every other virtue is a single living whole. Suppress that in any one department of life, and you have impaired it in every other. No man can be honest in Church and dishonest in State, honest in business and dishonest in politics, honest in the family circle and dishonest on the street. He may for a time and by decided effort keep up a distinction of that sort, but it will not be for long. If a nation learn to love anything more than the truth, it will soon happen that the truth will be last of all in its esteem. If our scandalous political campaigns, with their wholesale and systematic lying are not reformed by public and decided reprobation of

falsehood, we will come to a point when our mercantile honesty will have forfeited respect. Far more important than the question of this man or that for President, is the question : How many men will come out of the struggle with tongues defiled, with their love of the truth weakened forever? The habits formed in the heat of passion and conflict will not be eradicated by the return of quiet. The struggle as at present conducted must result in a general lowering of the moral standard through the whole nation. Christmas will find the deepest foundation of the national unity (which Republicans prize) profoundly shaken ; it will find the slavish mental habits and tempers which fit men for the centralized tyranny (that Democrats detest) developed in larger measure. Political falsehood helps to defeat the great end that both parties have at heart, by crushing out the manly virtue that alone can keep us a free and united people.

But why apply to truthfulness the epithet "manly," which implies in some sort a contrast with what is "womanly." Because the love of the truth which we have been speaking of, in distinction from its consequence truthfulness, is a cardinal point of manliness in a sense in which it is not womanliness. The one deadly insult to a man is to call him a liar ; not so to a woman. This rests on one of the profoundest differences between the sexes—the different methods in which the mind of each apprehends every subject. To man, qualified as he is for generalization, every fact is sacred as representative of a truth, every truth as the part of a greater, and in the last resort of the Truth. That a thing is false and is not according to fact and reality is an *a priori* ground for reprobation. The feminine intellect is endowed with less grasp of generalization, looks on facts in relation to actual life and to persons. The truth for its own sake is an abstraction for which she may have a profound respect, but not an enthusiastic love. Her especial virtues are purity and honor, and the latter, which implies fervent loyalty to persons, is the feminine equivalent for our *manly* virtue. Woman is in fact and act not less truthful than man, but she is so from secondary motives, rather than primal instincts. It is hard, therefore, to excite her enthusiasm against anything false simply as false. She reprobates it, but it does not rouse her resentment. Therefore it was that the Lutheran Reformation, like that now led by Döllinger, took fast

hold of the other sex; women rarely appear prominently in its ranks except where some great local grievance or outrage upon personal rights popularly associated with the older Church, as in the destruction of the Scottish monasteries. For this reason every great system of faith and teaching that is based on abstract truth only has been woman's enemy and oppressor, degrading her with every successive generation by its one-sided masculinity that gives no play to her affections and no place of honor to her mind. For this reason, on the other hand, little social insincerities and "white lies," like the not-at-home pretense, creep into social circles which she controls. "Such things," pleads the average woman, "hurt nobody and deceive nobody: why should they be wrong." It is not, mark you, the truth for its own sake that she seeks or was meant to seek. She hates a lie, not as opposed to that, but as an injury to some person. That is a very good and efficacious motive for telling the truth and the Cilician Apostle has sanctioned it as such; but it is not the supreme motive, the manly motive. For the same reason when the average woman takes any interest in politics, her interest is sure to take a personal shape. Not the truth *per se* but this or that champion or opponent of it excites her interest. She finds her thought taking shape from her affections at every step, and cannot dis sever an error from its advocates. And this is the last test of a *manly* man, his ability to distinguish between an opinion and those who hold it—to reject and oppose the former without either hating or despising the latter—an ability exactly proportional to his love of the truth for its own sake. If he have not that gift he is a womanish man, however loud he be in his voice, or brawny in his muscles, or coarse in his tastes, and that which is natural, graceful and womanly in the other sex, is effeminate and womanish in him. The touchstone of manliness is the toleration which is born of a love of the truth.

To come back to our starting point, what is the relation of the popular hatred of lies to the moral reforms which our social condition so loudly calls for? These few hair-brained reformers of ours managed to excite that hatred in opposition to their peculiar methods—could they not have used on their own side? Most certainly they could. In this as in almost every other social abuse, the root is a lie, and men can be stirred up to hate that lie. The

license given to our liquor dealers implies a distinct understanding between them and the community that their calling shall be exercised under strict limitations. They violated that understanding in violating the law; they should have shared in the outburst of indignation which was poured only upon those who prosecuted them.

Our reforms have largely failed because they have not taken this line; they have appealed to motives that met with no popular response and excited no hearty enthusiasm. The model reformer of our century is Thomas Hughes, who, by many a "touch of nature," makes the whole world feel akin. His speeches in the Tower Hamlets on the false weights, the unjust balances, the gross adulterations of food, by which the middle classes, who supported him, plundered the poorer classes who had no votes, is a splendid specimen of the popular use of ethical reasoning—the putting a moral argument in a way that makes it sting. We need such men as much as England does. They would fill a place that our professional philanthropists, with their great plans and ideas, and their slight hold on the popular conscience, can never fill. We need men who realize the instinctive, popular conception of manliness—men of breadth and insight, of toleration and moral force, who shall not confound the falsehood of opposition with the person of opponents. It is the complaint of many of the ablest advocates of "the temperance cause" that its history in America has been a continual decline from its first principles in this respect. "At first," they say, "we reasoned and discussed the subject in every possible aspect; all our ablest books were written at that stage. In late years we do little more than denounce. If an opponent attempts to assail our position, instead of rejoicing in the deed as giving us an opportunity to excite public attention to the question, and set the truth in clearer light, we merely overwhelm him with hard names and abuse. We have become so sure that we are right, that we are sure that every one that disputes the fact must be either a fool or a knave—more probably the latter." Is not this a true picture of many other efforts at social reform? Is not intolerance of dissent becoming more general among that valuable class of citizens, in whom the reformatory "salt of the earth" has crystallized. Just for this reason these men lose their hold on the popular conscience, and foil their own efforts.

THE ALPINE TORRENTS.*

FOR many years the geologists explained the existing form of our planet as due to convulsive movements of the ground. The mountains were rough uprisings, and the corresponding depressions formed the basins of the lakes and seas; the valleys being the gaps left open when the crust of the earth was disrupted. Everywhere in the solid crust of the earth are found the traces of catastrophes more or less recent. Certain modern geologists, for the most part of English origin, have repudiated these ancient doctrines. For the theory of *catastrophism*, the only one admitted up to this time, they have substituted that of *uniformism*, which sets forth that the phenomena are due to forces active at this day, certain variations in intensity excepted. Not sudden convulsions, but gentle oscillations whose effect is not perceptible until the lapse of thousands or millions of years; seas, whose depths increase or decrease imperceptibly with each century; valleys, which the glaciers and torrents dig out and level little by little; gravel fields and sandy deltas, to which the currents bear day by day a slight increment of material taken from the mountains—such is the history of the formation of the ever-changing globe on which we live.

This new doctrine, which has only the insignificant fault of assigning to the world a prodigious ambiguity, is conformable to the true scientific spirit, because it replaces the accidental cataclysms by the regular play of the ordinary forces of nature; and, besides, observed facts are favorable to it. The researches carried on all over the world, in level as well as in mountainous regions, have shown the wonderful force of the glaciers, not only of those which still hang on the flanks of the mountains, but still more of those which covered central Europe in prehistoric times, when the glacier of the Rhone stretched as far as Lyons, and when at the foot of the Pyrenees another glacier of from 400 to 800 metres in thickness had its terminal *moraine* within 15 *kilometres* from

* Extracted from an article on the subject by H. Blerzy in the *Revue des Deux Mondes*.

Tarbes.* Powdering the ground at their base, transporting to their surface large rocks without dulling their sharp edges, these heavy masses of ice glided slowly from the mountain heights, where they were formed, to the plains where the higher temperature reduced them again to water. They cut away the rocks and carried off the debris, performing on an immense scale the work of terracing, being at the same time pick and wheelbarrow. To quote to the very exact statement of M. Cézanne, "incessantly aided in their task by atmospheric action, their active force is inexhaustible, for the sun, like a gigantic pump which never ceases work, draws up the water from the seas to cast it on the mountains.

The work of erosion and leveling which the glaciers accomplished formerly with such vigor, and which they continue under our eyes with a more restrained force, the waves, the rivers, the mountain torrents and even the tiny streams perform likewise in a smaller degree; in every place the waters are charged with pebbles, sand or mud. The little streams which trickle over the surface of the ground after an abundant rain carry away with them a little dust; united in a little hollow they roll gravel; accumulated in a narrow ravine they displace enormous blocks, they wear away the banks which in falling to pieces furnish them with new material, all of which is deposited as the velocity of its current diminishes, whether the bed becomes wider or the descent becomes less steep. It, as it were, sorts the materials carried away, dropping the largest first, depositing the gravel when it assumes the tranquil flow of a river, but retaining the sand, whose lightness keeps it longer in suspension, until it reaches the sea. From this perpetual movement of solid matter from the heights to the lowlands follow three bad results: The mountain is incessantly worn away by the streams it feeds; the river-beds, filled up by sand and gravel, can no longer retain their waters, which in time of floods overflow their banks, and the mouths of rivers are obstructed by banks which the movements of the waves displace every day. Though there are sometimes advantages to be placed over against these grave difficulties; the troubled waters which may be

* See the papers of M. Ch. Martinson, "*Les Glaciers actuels et la période glaciaire*," in the *Revue des Deux Mondes* of the 15th of January, 1st of February, and 1st of March, 1867.

used in irrigation deposit on the soil a fertile mud ; but all the profit human industry can derive in certain countries from this operation, known under the name of *colmatage*, will by no means balance the disasters caused by the wearing away by the Alpine torrents, the inundations in the basin of the Loire, and the drifting banks of sand at the mouth of the Seine or the Garonne.

Our globe has passed through, in pre-historic times, but not before the appearance of man, a glacial era, whose gigantic efforts are evidenced here and there by collections of rocks, and whose terrible phenomena are reproduced on a small scale by existing glaciers. To-day it is the prey of an era of torrents. This doubtless has lost its primitive activity, for the spread of vegetation, and the changes of temperature diminish it from day to day. We see rivers flow calmly at the bottoms of valleys, which the waters formerly wore away more than 100 metres below the primitive surface of the ground. The torrents still, however, cause frightful ravages in some countries. After what has been said it is clear that the wearing away of the mountains by the torrents is in some sort the cause of the damage done to the plains by inundation and of the alluvial deposits on the shore. Whence we see that we must study the phenomena, and seek the remedy there ; but to do that we need not go far, our own south-eastern boundaries, and particularly the department of the *Hautes-Alpes*, furnishing lamentable examples of the work of the torrents.

The rivers flowing from the French Alps toward the Rhone, the Durance, the Drac and the Romanche, have all of them rapid and winding courses ; they carry down sand and mud, increase very much during the season of storms and the melting of the snows, and diminish in volume the rest of the year. It is not these streams which the inhabitants call torrents ; they reserve that name for the short feeding streams which take their rise in the mountain gorges, flow between steep declivities, and empty into the principle valley after a course of several miles, spreading over a bed disproportionately large. The torrent is divided into three distinct divisions : a receiving basin, a channel for outlet, and a cone of discharge. The receiving basin has the form of a vast funnel, whose sides, hollowed out by the water, fall away with every rain-storm. When it is situated in the higher parts of the mountains, the snow, with which the winter has filled them, is melted in a very few

days by the first warmth of spring, and the mass of liquid which accumulates at the bottom of the funnel produces a flood no less sudden than excessive. Earth, pebbles, even fragments of rock are carried along by the water, so that the capacity of the basin increases with each flood. In summer every heavy rain is followed by the same effect. The water flows rapidly over the worn sides unprotected by either bush or root, and the mountain is worn away until the living rock is exposed. That which specially characterizes the receiving basin is that the torrent is incessantly excavating it.

The channel for outlet is a narrow gorge deeply sunk between two steep banks, which, undermined by the current, fall in from time to time and furnish the torrent with a great quantity of alluvia, and the larger blocks it carries away. Except these fallings in, the current does no excavation, nor does it deposit anything, for the descent of the bed is always great; but, when coming out of this gorge, the waters empty into the valley, they spread over a large surface, lose in consequence their velocity, and deposit the materials they have no longer the force to carry with them: the largest first, and the smaller a little farther on. In this way is formed the cone of discharge, a rounded and extended artificial mound, a mass of blocks and pebbles which joins the mountain and extends it at the expense of the valley. The stream, when quiet, flows habitually over the apex of the cone, in a bed it has dug out for itself; but during floods it leaves this bed and spreads to either one or the other side of its discharges. Everywhere it goes it leaves more debris, until, arrived at the foot of its descent, it pours into the river whose affluent it is, its waters still charged with sand and dirt.

AGRICULTURE AND MANUFACTURES.

DIVERSITY of employment increases the value of man and land. In manufacturing districts farm-labor is always better paid than in districts purely devoted to agriculture. Mr. Caird, a very high authority, after thoroughly examining thirty counties in England, reports that in the eighteen southern counties, where the productive industries are little diversified, the wages for farm-

labor are not above 8s. 5d. a week, while in the twelve northern counties, where the coal and iron mines are, and manufacturing enterprise of all kinds is active, they are about 11s. 6d. "The influence of manufacturing establishments is thus seen," he says, "to add 37 per cent. to the wages of the agricultural laborers of the northern counties as compared with those of the south."

Arthur Young investigated the question in these same counties in 1770. Mr. Caird comparing the rates found by him in 1850-1851, with those given by Mr. Young in 1770, ascertained that the wages paid farm-labor had increased, in eighty years 66 per cent. in the manufacturing counties, and in the agricultural counties only 14 per cent., thus demonstrating that this difference was both produced and maintained by the great manufacturing establishments. The wages of labor must always be paid out of the value of the product. Skilled labor receives two or three times the wages of unskilled, because it contributes that much more to the production of the result. Wages then are a measure of productiveness.

One of the great facts in political economy is, that the value of land and labor can only increase in advancing conditions of society, and that there can be no real advancement unless they both increase together. In a country purely agricultural the increase in the value of land will of necessity be slow, for there are only a few products that will bear transportation to a foreign country or to a distant part of the same country. The agriculturist needs a home market to enable him to sell the small and perishable products of his farm, and even to keep prices equal. This he can only have when the industries of the community are diversified. Agriculture is found to be dependent upon the development and diversification of all other industries, and to be measured by the diversification.

In agricultural countries land has very little value compared with the value of the personal property. This is shown by looking first at a savage nation, then at a semi-civilized nation, and last at a civilized nation. In savage states of society land has no exchange value, no one claiming any particular tract of land as his own. It belongs to nobody and at the same time to everybody. Among savage states there is no property except personal property. As we advance to semi-civilized states we find in addition to personal property a small proportion of fixed capital or

real estate. Again, as we come to civilized states we find the proportion of real estate constantly increasing, and the amount of fixed capital to exceed that of personal property. Thus the law is established that the proportion of fixed capital or real estate, to floating capital or personal property held by any people measures the wealth and grade of civilization.

Among civilized people real estate always preponderates; among savage, personal property; the greatest prosperity and vital force is always found in the former class; the least among the latter. For example, the real estate of the States of Massachusetts, New York and Pennsylvania, as reported in the census of 1860, was 75 per cent. of the whole property; in the States of Maryland, Mississippi and Texas it was only $33\frac{1}{4}$ of the whole. In one district there was diversified industry, and in the other the employment of the population was purely agricultural. The vital force of the two districts was shown in the late war—one came out of the conflict richer than it went into it, while the other was ruined. Slavery, of course, is responsible in a measure for the difference. Labor expended upon land gives it its value, for in its primitive condition land has no value. A whole continent, without cultivation, has no value, or scarcely any; the natural yield amounts to nothing. An acre in the Western Territories is worth about one dollar; in parts of Pennsylvania an acre, as good but no better, is worth about two hundred dollars. Again, an acre in some counties of Pennsylvania is worth not more than fifty dollars, while an acre of equally productive soil near the city of Philadelphia is worth three hundred dollars; and so the country and the world over. In a word, a home market gives value to the farm product and, in turn, to the land. Nothing makes or can make a home market except diversified industries.

As the whole value of the land arises from the labor directly expended and reflected from outside industries upon it, so the farmer is deeply interested in the creation of a local centre of manufactures. He will see that farm lands near a great manufacturing city have much greater value than farm lands in the far West; he will see that this increased value comes from the demand for the product of the farm which will not bear distant transportation. Should he carry his inquiries further, he will see that the value of real estate increases in proportion to the extent

and diversification of industries. We are told that the product of the farmer is always in demand, that people the world over must eat, and that the farmer need not concern himself about other industries; but in truth no class so much needs the encouragement of manufactures, for only by diversification near him can the farmer have at command diversification of the products of his own farm; in no other way can he have a market for that which will not bear distant transportation. The products of a farm that bear transportation are not those that yield the best prices. No one will deny that home markets give value to land, nor that diversified industries create the home market.

"A universal principle of association and exchange rules here, as it does among all things, animate and inanimate, individual and social. Everywhere difference of quality, condition, capacity or position excites manifestations of force and exchanges of activities. In chemistry combinations of correlated elements develop varied and multiplied powers in the atoms of matter, give rise to new forms and forces, with something that approaches the miraculous, in the movements of nature. In astronomy differences of position and magnitude produce and determine the motions of the celestial bodies."

Differences alone awaken life; the greater the diversity of organs, the higher in the scale is the individual. So the more diversified the industries of a people, the greater the intelligence and force of the nation. There must, however, be harmony—a grand system of co-operation between the agriculturist and manufacturer; each must acknowledge its necessary dependence upon the other. Low-priced raw materials cannot bear the cost of distant transportation, and the manufacturing classes cannot afford the high-priced. The higher-priced raw materials—such as cotton, iron, lead, silk, wool and hides—will bear the cost of transportation, but the low-priced cannot bear the cost without adding so much that they are beyond the market value.

The manufactures of cotton and woolen goods brought from beyond the sea are maintained in England, but at a cost to the people that cannot well be estimated. Nearly ten per cent. of the whole population of England are at this time cared for in the poor-houses, while a still larger class are scarcely able to keep death, from starvation, from the house.

Good British authorities estimate that five millions of the people are removed only one step from pauperism. The absolute disregard for all moral laws, the utter depravity and the destitution of the laboring classes in England are patent to all. "This is the worked-out result of a system of industry that depends for full four-fifths of its raw material and one-fourth of its breadstuffs and provisions upon a foreign, and, in the main, a transmarine supply. Under this system Ireland, upon which the burden has fallen most heavily, has declined 2,820,000 in population since 1841, with the natural increase of at least 1,400,000 also lost. Thus it has starved, killed and banished full fifty per cent. of the Irish people in thirty years; and all this has been done as a necessity under the policy of importing foreign raw material, to be manufactured for foreign markets! Low wages must be forced to the edge of starvation in England, driving Irish labor still lower, the fearful competition of approaching destitution being used to hold down the rate of wages low enough to command the foreign markets, which the system struggles for. This is what it eventually costs a people who persistently violate the law of trade between nations; a law that limits exchanges to natural differences of their respective products; a law of climate, making supplementary exchanges necessary, and therefore right and orderly, allowing, however, a temporary accommodation of nations in the infancy of the arts by which they are for the time rendered incapable of self-supply, but fixing the limits of commerce rigidly at these natural boundaries—the consequences of transgression, as sure as those of any other natural law, being a measure of suffering to the aggressor proportioned to the injury inflicted upon the victim."

Thus it is seen how the manufacturer profits by being near the sources of his supplies, and at the same time near the consumer of his product. We have already endeavored to show the dependence of the agriculturist, the cultivator of the soil, upon the more skilled laborer who converts the raw material into shape for market. We have the same condition of affairs, that we have in England, in all countries that follow her lead. India presents the most awful picture; but Turkey and Spain and Cuba all prove the same thing. On the other hand, we see what diversified industry has done for our own country, for Germany, for Russia and for France.

What we aim to prove is that it is all-important for those engaged in the cultivation of the soil to encourage the manufacturer of cotton and woollen goods, the miner of coal, the worker in and miner of iron, and in fact each and every variety of industry. No nation exclusively devoted to agriculture can even farm well or get full yield from the soil, and must soon be reduced to a state of absolute dependence and slavery.

The movements in business which tend to increase the value of lands, under the increased demand for the products of the farmer, and the increase of the mechanic and manufacturing occupations on which agriculture depends, all tend to the development of man, and lift him up higher in the scale of civilization. A true system of political economy is one that tends to the advancement of the general welfare of the people, and this advancement depends upon the diversification of all the wealth-producing industries of the country. The political party which watches over the interests of the people in a true spirit will enact such laws, and execute them, as will encourage and stimulate such diversification as will develop all the latent energies of the people and of the country they inhabit. This can only be done in our case by a strong protective tariff. The protection afforded by the tariff of the last ten years has made men of our people, and our nation a very rich and powerful one, no longer dependent, but able to live within ourselves. In the coming election for President it is the duty, and at the same time the interest, of all, to maintain in power the party which has faith in protection of our varied manufactures, and not to suffer the Free Trade party under the lead of Mr. Greeley to grasp the reins of government.

THE hottest of summers following upon the coldest of winters, suggests the law of compensation which Solomon discovered and Goethe reiterated as the essence of all finite things. But may not the heat of our summer necessitate intense cold next winter, and that again bring us a summer as hot as the present, and so on forever? The weather-wise say not; a compensation may last for several years, but runs its course in a cycle of three or at the furthest of thirteen years, and all things come back again to a start-

ing point of equilibrium, each of the later reactions being less forcible than its predecessor.

It is some comfort to know what is the matter this summer. That venerable youth, the sun, has been renewing his youth in a strange and inexplicable manner, pouring forth whole deluges of magnesium vapor through the usually hydrogenic envelope of the chromosphere. Tacchini, the Italian observer, who makes the report, says: "It seemed to me as if I could see the whole surface of our great source of light renewing itself." He says that both astronomers and ordinary observers noticed a difference in the color of the sunlight this year. These little evidences of solar mutation are enough to make one uncomfortable as to the future. We have hitherto looked upon old Sol as a model of sober regularity, but we are now reminded that he is one of a class, some of which have gone out completely after a few flare-ups. If he is "no better than the rest of them," he may take such a freak as that into his head, or perhaps may go off on a spree of another kind by growing all at once fifty times as bright and hot as at present. Science can give us no assurance that he will not.

It is strange how little adaptability Americans show in this matter of climate. Our poets, as Lowell tells us, still eulogize May as the month of returning warmth and flowers, because it is so in England. Although we have no genuine spring until June, and our May is a mixture of the English March and the English April, the tradition of May flowers and May warmth clings in our literature. Our Roman Catholic brethren are even worse off as an ecclesiastical tradition with them confirms the literary one. May is "the month of Mary," sacred to the lily of Nazareth, for its floral beauties and fragrances which are unfortunately confined to Europe; could they change her month in America to October with its half-mystic beauties of the Indian summer, the season would suit better.

To come down to minor matters, why do we still follow English fashions in building houses with sash-windows which suit the English climate, instead of the lattices that would add so much to the comfort of our summers, and furnish also better protection against the draughts of winter? Is it anything but the dead inertia of our natural conservatism that makes us copy the windows of Middlesex, in Pennsylvania, and retain the climatic fashions of

the truly temperate zone in what an old Pennsylvannish-Deutsch doctor once called "die intemperate zone?"

Another of our superstitious traditions is the use of chairs as a rest for tired bodies. To rest is to reverse the conditions of work, to take out of use the muscles, etc., that have been in service. A chair gives actual rest to just so much of the body as lies between the knee and the hip; it gives partial rest to all below the knee. To the body proper and the head, and especially to the spine, which bears the chief brunt in most kinds of active exercise, the ordinary chair gives no rest whatever. To be sure the sitter on such a chair may slide forward on the seat so as to recline backward, but this brings him to sit on the end of the spine, a practice which has often caused spine disease. If he rest himself by stooping forward he compresses the lungs and prevents their free action, with equally bad effects. After all the Turks have some merits. That they tell the truth and expect others to speak it, is generally admitted. They also know a thing or two about house-furnishing, about the carpets with which they cover their floors, and the seats which they provide as resting places for the wearied forms of mankind.

THE current political campaign bids fair to prove the most intensely personal in all our annals, with the possible exception of 1832. The two candidates are both so well known, and one of them has spent so many years in the freest expression of his views about persons and principles, and the old party lines of division have been so broken up by recent movements, that the fullest facility is given to the men of small calibre and of waspish disposition, who abound in all quarters of our politics. We fear that we must class *The Nation* among the very worst of these offenders. The friends of that weekly looked to it for the beginning of a great revolution in the newspaper world, in this very respect, but the animus it displays, at present, is of the worst. We gather from all its expressions, paragraph and article alike, that while it almost despises one candidate, it hates the other most fervently. When *The Nation* was started, it was spoken of as likely to occupy the place held by *The Spectator* in England, but it has really come to occupy just the opposite one. *The Spectator* is the great anti-

cynical organ, the paper that tries to discern good everywhere, in friend and opponent alike. Hence the exceeding weight and force of its denunciations, when it does denounce, which is not often. *The Nation* is studiously destroying its moral weight by every successive issue. It actually looks upon the present struggle with less fairness, and less of the insight that is born of fairness, than does the *New York Herald*. It may soon take for its motto the explosion of the old grammarian of Renaissance times, "May God confound your theory of the irregular verb!"

NEW BOOKS.

ANNALS OF PHENIXVILLE AND ITS VICINITY FROM THE SETTLEMENT TO THE YEAR 1871. By Samuel W. Pennypacker, Philadelphia: Bavis & Pennypacker, 1872.

Within the last few years there has been a wonderful increase in the number of histories of particular places and families, works which, though for the most part of merely local or private interest, yet frequently contain matter of general interest. The majority of these books have appeared in New England and New York, but of late the mania seems to have spread over the country. Of these, the work named at the head of this notice is a fair sample, the larger part of it being devoted, of course, to the histories of the neighboring families, but not interesting to those outside of the place and families; but some parts—that, for example, devoted to the early settlement of the place—would, *mutatis nominibus*, nearly apply to other localities, which of course makes it interesting as a specimen; and then in this volume there is a very nice little bit of colonial history, being the account of a quarrel between Governor Denny and the Colonial Assembly, in reference to Wm. Moore, one of the justices of the peace for Chester county, and father-in-law of Dr Wm. Smith, the first provost of the university. To enter at all into the merits of this quarrel, would lengthen this notice too much: suffice it to say, that his neighbors, over whom he exercised his office of justice of the peace, "moved by envy, malice or uncharitableness," tried very hard to get him removed, in which they were seconded by the Colonial Assembly and by the governor, who had an absolute veto upon the doings of the Assembly. In conclusion we would notice the evidently great research made by the author in obtaining the materials from which his volume is made, and which is always laudable, whether in a work of this kind or one of more general interest.

We have also received from Messrs. D. Appleton & Co., N. Y., *Story of a Millionaire*, by Miss Muhlbach, and *The White Rose*, by G. J. Whyte-Melville, which we will notice in our next.

THE
PENN MONTHLY.

OCTOBER, 1872.

AMERICAN SHIPPING INTERESTS.

IT will not be easy to say anything new upon this subject, which, during recent years, has been so fully discussed in the newspapers, in commercial meetings and in the halls of Congress. Nor is it necessary that anything new should be said; the purpose of the present paper will be accomplished if it shall conduce to a more careful consideration by any thoughtful man of the measures which may appropriately be adopted for the restoration of the shipping interests of the country to something like their former condition of prosperity.

Since the year 1861 the amount of shipping under the American flag has diminished by a million and a half of tons. Of this decline, half a million of tons may roughly be stated to have taken place in the coastwise, and a million in the foreign trade. During the decade, we have been selling tonnage largely to the citizens of other nationalities, while we have failed to make good the deficiency resulting from this and other causes, by ship-building. In the meantime our imports and exports have largely increased both in quantity and in value, so that we have fallen off both relatively and absolutely in our participation in the ocean carrying trade.

In discussing the decline of American shipping interests, and in seeking for a remedy, certain distinctions must be borne in mind.

I. In the first place we must discriminate between ship-building and ship-owning.

Ship-building in the United States took a new start in 1846 and 1847, and, except in 1849, increased year by year until 1856. It reached its culminating point in 1855. The figures from 1854 are given in the following table :

	Tons.		Tons.
1854.....	535,636	1863.....	310,884
1855.....	583,450	1864.....	415,741
1856.....	469,394	1865.....	378,246
1857.....	378,805	1866.....	336,147
1858.....	242,287	1867.....	303,529
1859.....	156,602	1868.....	273,275
1860.....	212,892	1869.....	275,230
1861.....	233,194	1870.....	276,953
1862.....	175,076	1871.....	273,227

The discovery of gold in California and Australia gave an extraordinary impulse to ship-building in 1848 and the years immediately succeeding. A reaction commenced in 1856, which was aggravated by the commercial disasters of 1857, and the annual production of tonnage fell off until 1860, when it began again to increase ; in 1862 it was temporarily checked, but it took a new start in 1863 and 1864. Since 1864 it has almost steadily declined, and in 1871 the total of tonnage construction in the United States was less than in any year since 1862. In the New England States, the production was less in 1871, than in any year, except 1862, since 1844 ; in 1872 there has been a decided improvement.

The decline of this industry, and the disabilities under which it rests at the present time are the results of a complication of causes. The three-fold change from wood to iron, from canvas to steam, and from coastwise vessels to railway lines, all of which have been fully developed within the last twelve or fifteen years, would of itself have temporarily paralyzed our ship-building operations, even had there been no civil war, no depreciation of the currency with a corresponding advance in prices, and no high scale of duties on imported articles. Is it strange then that all these causes combined—the havoc of the cruiser, the disturbance of the currency, and the interference of the tariff, superadded to changes in the construction and propulsion of tonnage, and,

consequently, in the whole course and direction of commerce, which have been almost revolutionary in their scope and in their effect, should have closed our ship-yards to a very considerable extent, and stopped, for the time being, the building of vessels for the international trade of the globe?

The direct effect of the civil war upon American ship-building has been greatly overrated; at no time during the continuance of hostilities did the total production reach as low a point as in 1859, and since the return of peace, in 1865, it has been falling off almost from year to year. Under ordinary circumstances, a comparatively short interval might have sufficed to make good the place of the eight hundred thousand tons sold between 1861 and 1865 to foreign flags,* and, it should be said, sold on terms, for the most part, very favorable to our own citizens; and it would seem that this process had really commenced while the war was still in progress. But in due time the influence of an onerous system of taxation and of a depreciated currency made itself fully felt upon prices; and then it began to be apparent that indirectly, and through these its legislative consequences, the war of the rebellion would prove far more disastrous to the ship-building interest than in its direct results and during its actual continuance.

It is important that the precise causes and limitations of the injury wrought by or in consequence of the war should be borne in mind, in our search for a remedy. Only the disabilities created by legislation can be removed by legislation. And here, we think, many of our ship-builders have made a mistake. They desire to see their industry established in its *status quo ante bellum*, and they present many ingenious arguments to prove that this result ought to be secured at all events. But the question is, not what might or should be, but what is and will be; the only thing for these enterprising men to do is to accept the condition of things as it is, and to adapt themselves to it. The past cannot, by any possibility, be exactly reproduced in all our ship-yards: there will never be the same demand as formerly for wooden ships and sailing vessels, although the former may come into use again to an extent which none of us anticipate; the old methods of construction and propulsion will never again come into general use. Those, therefore, who are expecting that the ship-building

* To England alone in the year 1861 to 1864 inclusive, 480,882 tons. [ED.]

interest will be restored to its precise former conditions, and who think that the Government can help them to the realization of this expectation, are doomed to inevitable disappointment.

So far as relates to the currency, nothing can be done to help the ship-builder in advance of everybody else in the nation; we cannot resume specie payment for him until we can do it for everybody else at the same time. But in respect of the tariff the case is somewhat different. It is possible and practicable to give him the benefit of an abatement of the duty on such materials of foreign growth or production as it may be necessary for him to use, and we will endeavor to show presently that, so far as international trade is concerned, no injustice is done to any one in treating him thus exceptionally. Just before the adjournment of Congress a bill was passed, which is the first measure of relief accorded to the ship-builder since the period of the war, and which proposes to help him in this way: The bill provides that lumber, timber, hemp, and iron and steel rods, bars, spikes, nails and bolts, and copper and composition metal, used in the construction, equipment and repair of vessels to be employed in the foreign trade of the United States, may be withdrawn from bond without the payment of duty, under such regulations as the Secretary of the Treasury may prescribe. This legislation was a step in the right direction; and if all the advantage from it which was anticipated has not been received, this may be owing, perhaps, to some extent, to the partial and incomplete character of the measure itself, but is chiefly due to the character of the expectations which have been cherished in connection with legislation desired or proposed, and which, as we have intimated, from the nature of the case, could not be fulfilled.

We have spoken first of ship-building, because in the natural order it comes before ship-owning, standing related to it, indeed, as the means to an end. The object of all production is consumption, and ships are built in order that they may be owned and employed. Ship-building, therefore, although in itself an important industry, is subordinate to and dependent upon ship-owning.* The profit upon the construction of a ship is soon determined and made up; the profit upon the ownership of her may

* McCulloch says: "Navigation and naval power are the children, not the parents—the effect, not the cause—of commerce."

be expected to continue through a series of voyages and a term of years. Her construction is only an incident in her history; her career subsequently is the main thing. The two interests thus being so entirely distinct from, although related to, each other, it need hardly be said that their prosperity respectively depends upon different conditions, and that, when they are both depressed, remedies peculiar to the circumstances of each, and, it may be, quite dissimilar in their character, must be applied. While any measures calculated to advance the ship-owning interest would, almost as a matter of course, promote ship-building, it does not follow that an increase of ship-building would always and inevitably prove advantageous to the ship-owning class.

It is to be observed that the causes growing out of the war which have depressed the ship-owning interest in the United States are entirely distinct and different from those which have injuriously affected the ship-building industry. Ship-building was flourishing and perhaps profitable in this country, long after it had become unsafe to own and employ ships under the American flag. There were foreign markets in which vessels could be sold, and there were foreign flags under which they might be safely sheltered; consequently until the effect upon the cost of production of the great advance in prices had fully developed itself, which was not for some time, ships continued to be built. On the other hand, at the close of the war,* although ship-building for the foreign trade had been brought almost to a standstill by pressure of taxation and the depreciation of the currency, there was nothing in the nature of things, nothing but the operation of our own prohibitory laws, to prevent the immediate revival of ship-owning enterprise.† Our merchants who, in order to maintain their trade with distant parts of the world, and in many instances to keep branch houses in existence, had been compelled to place their ships under the protection of neutral flags, would have been greatly accommodated by the granting of permission, which was denied by Congress, to reinstate them in the enjoyment of their privileges as American vessels, and the Government

* Ship owning was very unprofitable at that time all over the world. [ED.]

† The cost of running American ships was much greater than that of running foreign ships, owing to the higher scale of wages prevailing in the community from which sailors had to be recruited. [ED.]

would have been a gainer also. So, too, if our merchants had been allowed to make purchases in foreign ship-yards, and to register their tonnage thus acquired under the American flag, they would undoubtedly have availed themselves of the opportunity, and the Government would have had so much more property* upon which to collect revenue in time of peace, and which would have been of the utmost value in the event of war. The so-called premium upon gold would not have prevented these purchases, because the earnings of the ships would have been in gold; nor could our taxation, under our tariff and internal revenue systems, in any way have interfered with them. But at this most critical point in our commercial history, the prohibitory provisions of our navigation laws, received by inheritance from a century which had little in common with the present, and from a people which had abandoned them as unjust and impolitic, were not even temporarily suspended, and Congress deliberately refused to allow our merchants to engage renewedly in ocean commerce, and especially to establish ocean steam lines, in the only way then practicable. What is the result? The Secretary of the Treasury, in his last annual report, tells us:

"Returns for the fiscal year 1870-71 show that the ocean commerce of the United States is passing rapidly into the hands of foreign merchants and ship-builders. In the year 1860, nearly seventy-one per cent. of the foreign commerce of this country was in American ships; in 1864, it had fallen to forty-six per cent.; in 1868, to forty-four per cent.; and in 1871, it is reported at less than thirty-eight per cent."

It is seven years or more since the suppression of the rebellion, and we find ourselves still falling behindhand in the competition for the carrying trade of the ocean. Mr. Secretary Boutwell puts the value of our exports and imports at nearly eleven hundred millions of dollars, and he estimates that during the present decade it will reach fifteen hundred millions annually; he also sets the annual returns from freight and passengers at one hundred millions of dollars, but he makes no recommendation which, if

* Government would have had no more property to tax, for the buyers of the ships would have had to sell, or to forbear from purchasing, other taxable property. ED.

adopted would enable our merchants to purchase tonnage at home or abroad on as favorable terms as are open to the merchants of all other nations,* and so long as the cheapest vessels, everything besides cost being equal, fix the rates of freight, our own citizens must be contented to stand aside for a time, and see more favored foreigners enrich themselves in this vast trade at our expense.

Congress would seem to have failed thus far to appreciate the importance of encouraging the ownership of vessels by American merchants. The law to which we have referred, abating the duties upon materials used in ship-building, contained a provision, as originally framed, allowing ships' stores to be withdrawn from bond free of duty for consumption at sea; this proposition had been favored by business men of every shade of opinion on politics and political economy, and it passed the House of Representatives, but the Senate threw it out. The Senate, however, added an amendment, permitting the return to the privileges of American registration, during a period of two years, of all vessels transferred to foreign flags while the civil war was in process; but this was lost while the bill was in the hands of a conference committee, and the ship-owner was left at the close of the session precisely where he was before, except that perhaps he might contract for a wooden ship at a somewhat less rate than he could previously have done. Mr. Senator Corbett of Oregon had prepared a carefully considered and well balanced bill, cautious in its provisions, and conservative in the changes which it proposed, and the Committee on Commerce of the Senate was understood to approve the measure; but it was not acted upon. We will hope that it may receive the attention it deserves, at the approaching winter session.

The prohibitions of our navigation laws have been maintained avowedly with the purpose and expectation of promoting the prosperity of the ship-building class. That is to say, the greater interest has been sacrificed for the lesser. In 1855, when ship-building in the United States was at its best, the total production was 583,450 tons. The vessels entered at American ports from foreign countries alone, in 1871, registered 6,714,741 tons. The

* Neither does it recommend any course which would enable our citizens to purchase any other products of labor as cheaply as they may be bought in countries where labor gets lower wages. [Ed.]

tonnage employed in the foreign commerce of the United States last year was therefore nearly equal to twelve times the entire tonnage built by us in the most prosperous ship-building year.* The value of the product of all the ship and boat-building establishments of the country during the same year, 1855, was about thirty millions of dollars; the average annual value of the product of these establishments during the last twenty years has been from eighteen to twenty millions.† On the other hand we have the authority of Mr. Boutwell for placing the amount earned last year, in carrying freight and passengers from and to our shores, at one hundred millions of dollars. We have abandoned this greater amount for the lesser, but unfortunately we have not gained the lesser. We have given up the carrying of the cargo for the sake of building the hull, but we have not been able to build the hull. The effect of our legislation in the supposed interests of American ship-builders, according to the respected secretary himself, is that our ocean commerce "is passing rapidly into the hands of foreign merchants and ship-builders." American ship-builders are divided in opinion among themselves, as to the value to their business of our prohibitory laws; we do not see how there can be any difference of opinion among foreign, and especially British, ship-builders and merchants, in reference to the vast benefit which is accruing to them from the continuance of these laws, for the policy in which we are persisting is securing to them, year by year, a closer monopoly of both the ship-building and the carrying trade of the globe. Our own firm conviction is, that while the repeal of these prohibitions would impart an instantaneous impulse to the ownership and employment of tonnage under the American flag, its effect would also be at no distant day to awaken activity again in many of our now quiet, and almost deserted yards and shops. The restoration of the commercial class among

* This tonnage entered is here counted as if a vessel entered an American port exactly once per annum, while the fact is that the vessels engaged in trade between the United States and other countries, will average about three or four entries per annum in our ports. [Ed.]

† The census returns for the year ending June 1st 1860, give the following figures for the ship and boat-building industry in the United States: Number of establishments, 614; number of persons employed, 9,260; capital invested, \$5,472,815; value of products, \$11,667,661.

us, would speedily lead to a revival of the ship-building industry ; the latter must, in the long run, stand or fall with the former.

It is true that some of our public men have proposed to encourage domestic ship-building by a system of bounties and subsidies, to be paid to the ship-builder or the ship-owner out of the national treasury ; in other words, they have asked the government to assume the difference between the cost of production in our own and in foreign ship-yards, to enable American citizens to supply themselves with tonnage on terms which will allow them to compete with the citizens of other countries. This difference, notwithstanding the recent advance in the price of coal and iron in Great Britain, must still be an important sum against us. Some have gone further than this, and, urging that the merchants of other countries can sail their vessels more cheaply than those of the United States can do, have insisted that the government should make up this difference also, as well as the difference in the first cost of construction. Of course, if this to be done for any one or more of our citizens, it must be done for all of them who may desire to build or to employ tonnage ; any discrimination in favor of particular individuals or corporations would be manifestly unfair. But are the people of the United States prepared to assume the cost of restoring and maintaining the tonnage interests of the nation, leaving the profits to be enjoyed by a privileged few, and especially when, by modifying and repealing the navigation laws, which have proved themselves to be inadequate to the purpose for which they were enacted, the desired result can be reached more expeditiously, more economically, and in all respects more satisfactorily ? It must be generally admitted, we think, that whether the proposition to pay bounties and subsidies for the encouragement of ship-building or ship-owning be wise and just or not, it does not receive the approbation of the country at large, and cannot be carried through Congress. The alternative remains, therefore, either to open our registration to tonnage wherever built, or to leave the carrying trade of the ocean in the hands of foreigners, until the cost of producing ships in this and other countries shall have become so far equalized by the abatement of prices on the one hand, and by their advance on the other, that American merchants shall find themselves able to purchase from

American yards on substantially the same terms as foreign merchants from foreign yards. This latter may be soon, or it may be the work of years; and the question arises, what opportunity will there be for us to enter the field of competition after our voluntary withdrawal from it for a lengthened period, during which perhaps every available route on the globe will have been taken possession of by the merchant fleets of other nations less restricted in their maritime policy than ourselves?

II. The next distinction to be noticed in the discussion of this subject, is that which exists between internal and international trade.

Our internal trade is under our own control, and is subject to such legislation and other influences as we may choose to bring to bear upon it. It is active or depressed, according as the country at large is prosperous, or the reverse. The extent of our participation in foreign commerce depends upon altogether different conditions. International trade is regulated in its movement by laws which are general, and not special or local in their origin or effect. It is as broad in its relations as the circumference of the globe, and it offers its rewards to all nations and to all individuals upon precisely the same terms. Mr. Longfellow, in a familiar poem, says:

"There's not a ship that sails the ocean,
But every country, every clime
Must bring its tribute, great or small,
And help to build the wooden wall."

This cosmopolitan character of a ship in the materials of her construction illustrates finely the breadth and universality of the laws by which she is governed when she has taken her place upon the great highway of international traffic. In her progress from country to country she will run up many a flag at her fore, although the same national ensign shall always flutter over her quarter deck; and the utmost privilege she can claim for herself anywhere, will be that she may be put upon the same footing, for trade and for all other purposes, as the vessels of other nationalities.

Commerce in the fullest sense of the word knows no nationalities. Mr. Everett brought out this idea admirably in his speech at the dinner given at Danvers to Mr. Peabody, in the autumn of 1856, when he said:

"I do not speak of English commerce or American commerce. Such distinctions enfeeble our conceptions. I speak of commerce in the aggregate—the great ebbing and flowing tides of the commercial world—the great gulf-streams of traffic which flow round from hemisphere to hemisphere, the mighty trade-winds of commerce which sweep from the old world to the new—that vast aggregate system which embraces the whole family of man, and brings the overflowing treasures of nature and art into kindly relation with human want, convenience and taste."

Of the tonnage employed in the commerce of the world, about fifty per cent. is owned by Great Britain and the British dependencies, twenty per cent. by the United States, seven per cent. by France, six per cent. by Germany, five per cent. by Sweden and Norway, and the remaining thirteen per cent. by Italy, Holland, Spain, Austria, Greece, Russia, Denmark, Chili and Belgium respectively.

Our share of this tonnage has not been increasing, but rather diminishing year by year to the present time, and for the reason, as has been said, that while we could not produce ships at as low a cost as other countries, our citizens have been practically forbidden by our laws from going abroad to purchase. Every other article of merchandise and tool of trade may be imported into the United States, and the protection of the government will be thrown over it; but ships, the great instruments of commerce, if purchased by our merchants from foreign yards, are virtually declared contraband by our laws, even in time of peace, and the flag of this great commercial country is denied to them. What the effect of this absolute prohibition has been we have already noted: it has deprived us year by year of ocean traffic worth millions upon millions of dollars. It has inflicted a heavy loss upon ourselves, but upon ourselves only. We may exclude ourselves from a full participation in the general commerce of the ocean, but we do not, and we cannot, in the same way, succeed in excluding others. We can control the shipping trade of our own shores, and the so-called coasting trade between our Atlantic and Pacific ports, because they are restricted by us to our own flag, and are absolutely protected by our laws against outside competitors. These particular interests are not affected by any difference in the cost of building ships at home and abroad, or by foreign compe-

tition in any form; but when we come to the trade carried on by water between ourselves and British North America on the one hand, and the countries of Central and South America on the other, and among the various nations of the globe, we find that we have no power of prohibition except for ourselves, and that even our flag can secure for us no exceptional immunity from the inevitable operation of the laws of trade.

The international commerce of the ocean being in no manner subject to local or municipal law, but open and free to all upon equal terms, it follows that any nation which would engage in it should relieve its merchants from every disability which places them at a disadvantage in competition with merchants of other nationalities. Every such disability, whether in the form of tax or of prohibition, insisted upon by any one nation, is *pro tanto* an act of discrimination against itself, and in favor of all others. The citizens of every nation on the globe, the United States only excepted, may purchase tonnage wherever constructed, or by whomsoever owned, and may receive national protection for it; and in this respect they enjoy an important advantage over the citizens of the self-excluded nation, an advantage which no policy of bounties and subventions, or protection in any form adopted by or in behalf of the latter, can permanently overcome. It is the boast of an English writer on commerce, that "all the building ards, and all the seamen of the world, may be made subservient to the wants and purposes of our [their] merchants and ship-owners." A recent traveler in the United States, a most intelligent and friendly critic,* states the case as it affects us in a forcible manner. After enumerating the various steamship lines, British, French and German, engaged in the trade between this country and Europe, and remarking that none of them sail under the American flag, he says:

"Nearly all the companies named above have had their vessels built on the banks of the Clyde. Even the French ship-owner has found it profitable to purchase British-built iron steamers. But the American ship-owner cannot do this if he would. Consequently he is at a disadvantage when compared with his foreign rivals. They are free to make contracts which redound to their profit, while he is so carefully protected against using his own

*Mr. W. F. Rae, in "Westward by Rail."

discretion as to be helpless to perform that which he deems the best for himself."

How long is this discrimination against American merchants to continue? The argument for a more liberal policy is concisely stated in the memorial to Congress of the National Board of Trade, prepared in accordance with the unanimous vote of the board at its St. Louis meeting last winter, and we will quote two or three paragraphs from it :

"That bearing in mind the large profits which accrued in former years from the employment of American shipping in the foreign carrying trade, the National Board of Trade deplores the present almost exclusive control of this trade by foreign flags.

"That in view of the fact that the diminution of tonnage has led to the almost complete withdrawal of American merchants from the ocean carrying trade of the world, and consequently to the drying up of a valuable source of national wealth, the National Board of Trade considers it as of the first importance that measures should be adopted by Congress to facilitate the restoration of this tonnage with the least possible delay and the lowest possible cost.

"That the truest expediency would therefore require that the citizens of the United States should be permitted to go abroad and purchase ships wherever they find such as they desire to employ, and that they should be permitted, for all the purposes of foreign trade, to register them under the flag of the United States.....

"That the concession of the right referred to to American citizens who may thus be induced to engage in ocean commerce, and to attempt the restoration to the country of this means of adding to the national wealth, can work no possible injury or injustice to the American ship-building interest, which, during the last ten years—the period of the gradual decadence of American ship-owning—as previously, has enjoyed an absolute monopoly for the production of American tonnage, and yet has not been and is not now able to construct ships, and especially steam vessels, at prices which our merchants could afford to pay to enable them to enter into the open and unrestricted competition of ocean traffic.

"That the question is simply this : whether vessels which in large supply are building and will inevitably be built in foreign ship-yards, shall be allowed, by our adherence to our present prohibitory

policy, to be employed exclusively for the benefit of foreign merchants and nationalities, or whether a portion of them shall be made available for the benefit of our own citizens, and for the reconstruction of our own national marine?

"That it is a question of the 'flag' rather than of the 'keel,' and that in the present exigency it is more important that we acquire and possess tonnage than that we stop to ask where or by whom it may happen to have been constructed."

There are some who favor the admission of foreign-built vessels to American registration, but who think that a duty should be levied upon such tonnage, as upon any article regularly imported into the country. As between the government and the individual merchant, there can be no doubt that as an abstract proposition this might be right, but the question, as it stands, is between the American merchant and his foreign competitor. The object being to place the two as nearly as possible upon the same plane of privilege, it is proper to inquire whether it would be expedient to lay an import upon the tonnage of the former, from which that of the latter is exempt. A registration fee, or a small tax for making the transfer, might perhaps be charged without damage to any one; but to exact a rate of duty at all approaching to the average import levied upon regular importations, would only tend to continue the discrimination against ourselves, from which we are now suffering. But would it not be perfectly right and fair for Congress to treat tonnage purchased abroad by our citizens for employment in foreign trade, and brought hither for registration as being in fact no importation at all? It would not remain here; its earnings would accrue beyond the limits of the country; it would not in any sense come into domestic use. The owner residing here should be taxed for this as for other property belonging to him; but the ship itself should be entitled, we think, to go free. This principle was recognized in the enactment of the law of which we have spoken as passed by Congress shortly before the adjournment, providing for an abatement of duty upon articles of foreign growth or production used in the construction of vessels to be engaged in the foreign trade. These articles are to be dealt with just as any ordinary exports from bonded warehouses, upon which, as a matter of course, no duty should be laid. The same rule should be extended to all ships' stores used on foreign voyages;

they are literally exported, and are consumed out of the country. Other nations encourage the outfitting of ships at their ports, by allowing supplies to be withdrawn from bond without the fragment of duty; but we have a policy the reverse of this, and so again discriminate against ourselves.

The proposition to abate the duty upon articles of foreign growth or production, entering into the construction, repair or outfit of vessels engaged in our domestic trade, would have to be depended, if at all, upon entirely different considerations, those, namely, connected with internal transportation, but, as it does not appertain to the subject immediately before us, we shall not dwell upon it.

III. In discussing the present condition of American shipping interests, it is important also to discriminate between the necessities of commerce and all questions of national naval defense.

The patriotism of those who would reform the navigation laws of the United States is sometimes called in question. We shall not stop, however, to defend it. During the debates in Parliament which led to the repeal of the prohibitory clauses of the British navigation laws, Lord George Bentinck said that this was "simply a measure for the encouragement of the United States marine," and Mr. Drummond and Mr. Disraeli talked in a similar strain. The same kind of argument has been, and will be, made use of in this country, both within and outside of Congress. But it may be sufficiently answered by saying that the quality of that patriotism cannot be gainsaid, which would promote to the utmost and in every direction the industrial energies of the nation, and which would draw from every source of supply for the accumulation of the national wealth.

On the general question of national defense, it may be remarked that the nation which is the most successful in the cultivation of all the arts of peace, and which is the strongest commercially and financially, will, in the long run, prove invincible in war. In modern warfare, the issue depends greatly upon the length of the national purse. The policy of the United States has thus far been to prepare for war in time of peace, but to prepare by assiduous attention to all peaceful pursuits, commerce, manufactures, agriculture and education. It is not in communities in which men commonly go armed that good order and

personal safety most noticeably prevail. But, admitting that for many reasons it may be desirable to maintain a naval force, larger or smaller, under the American flag, we would urge that every measure relating to it should be considered solely in its naval and national bearings. If it is thought best to increase the number of our effective ships of war, or to multiply the appliances for their construction at some future time when they may be required, let this be done at the suggestion of the Navy Department, and under the guidance of the naval committees of Congress, and let the cost be included in the naval estimates; but let there be no pretense that in doing this we are promoting the shipping interests of the country. The naval question must be settled upon its own merits, and so must the commercial question. The two are entirely distinct, and both interests suffer when they are confounded.* The man-of-war will not make a very useful merchantman, nor will an elaborate policy for naval defense build up the commercial marine. When the calamity of war breaks upon a nation, commerce in all its branches, as every other peaceful interest, must take the subordinate position, and its claims must wait in abeyance; but in the meantime it has a right to be treated independently and by itself, and in accordance with the principles under which it will best flourish. The mercantile marine is sometimes called the right arm of naval defense, but to prove so, its growth must be natural and its development must be normal. The very possession, however, of strength available for an emergency, is usually the surest pledge that it will not be called into requisition, and we prefer to look upon the other aspect which commerce presents to us. In this view we would commend to "the wise who think," and the wise who rule among us, the beautiful and earnest appeal of the poet-laureate, of England, to the representatives of the nations assembled at the opening of the International Exhibition of 1862:

"O ye, the wise who think, the wise who reign,
From growing commerce loose her latest chain,
And let the fair white-winged peacemaker fly

* England thinks differently. She subsidizes swift, strong, iron steamers, plying to various ports, upon the condition that they shall be built suitable for use as naval vessels, and shall, in case of war, be surrendered to the Government for naval use. [Ed.]

To happy havens under all the sky,
And mix the seasons and the golden hours,
Till each man finds his own in all men's good,
And all men work in noble brotherhood,
Breaking their mailed fleets and armed towers,
And ruling by obeying nature's powers,
And gathering all the fruits of peace and crown'd with all the flowers,"

We must hasten to a close. It was Homer, we believe, who characterized the sea as "unharvested." A modern poet, Mr. Matthew Arnold, has a line which has been justly admired:

"The unplumb'd, salt, estranging sea."

To us, in the United States, the ocean now unfortunately yields but a scanty harvest as compared with the golden fruits which we once reaped from it, and the gains which at the present time it is pouring into the laps of our competitors; and too many of our swift ships, which accomplished so much in overcoming the estranging and alienating power of the sea, have folded their white wings and discontinued their mission of peace and good-will among the nations. But let us not doubt that the ocean still has treasures in reserve for us which it will yield in response to our vigorous and undaunted effort, and that its highways will once again be lighted up, and to our eyes at least be made cheerful by the presence everywhere of the starry flag. To this end it is necessary that we abandon for the future, both in the letter and in the spirit, all regulations like those which the Protector Cromwell, in his disappointed ambition and in his unforgiving animosity,* framed against the commerce of the Dutch;† and that, by a wise and discriminating adaptation of means to ends, and by a clear recognition of the laws by which international trade in all its

* This English animosity ended, however, by utterly crippling the Dutch marine. It aims to do no less for ours, and as means to that end exhorts us to use her ships rather than have any of our own—or to buy ships from her rather than build them ourselves—or to buy materials from her to build our ships of—any thing to prevent us from becoming independent of her. [Ed.]

† The spirit of the English commercial policy of that period is illustrated by a dispatch of Sir Thomas Roe, the English Governor of the East Indies, (1618,) in which he tells the directors at home that "he had been very industrious to injure the Dutch, and that some who had lately arrived at Surat from the Red sea, he had done his best to disgrace." (See *Industrial History of Free Nations.*)

branches and in all its movements is governed, we seek earnestly and persistently to recover our once enviable position as a commercial power upon the ocean. It may have been by no absolute fault of our own, at the first certainly, that this position has for the time been lost; but surely we shall have no one but ourselves to blame if we longer postpone the use of the proper means for regaining it.

HAMILTON A. HILL.

In presenting to our readers Mr. Hill's frank and ingenious argument in favor of repealing the navigation laws, which since the foundation of the government have been considered a part of our national policy, no less fixed than the maintenance of our harbor defenses or light-house system, we must not be considered as accepting his views.

Our own conviction is, that long after the termination of the present exceptional period of that extreme difference between the wages of labor in this country and in Europe, whose end is even now foreshadowed by the strikes and rising prices in all European countries, sound policy will require our firm adherence to the time-tried navigation laws under which our mercantile marine achieved all its triumphs.

The sound and vigorous internal development of our country, the multiplication and diversification of our home industries, the improvement by railroad and water communication of our interior commerce, are much more important to our present gain and future welfare than is foreign commerce. During the transition period described by Mr. Hill, when wood and canvas are giving way to iron and steam, our energies have been in the main better and more profitably bestowed upon those internal necessities.

As the conditions of success under the new regime become apparent, our people are beginning to turn their attention to ship-building in the new style, and they are certain to attain excellent results. One inevitable feature of the new era, however, is the removal of the ship-building industry to the more southerly States, and particularly to the banks of the Delaware. No legislation can obviate this. When ships were made only of wood, the immense forests of Maine enabled her to build vessels cheaper than could Pennsylvania. Now that they are to be of iron, and propelled by steam—that is by coal—the Pennsylvania iron furnaces, and mills, and coal mines, enable this State to overcome the rivalry of those sister States, who, to compete, must derive from her their materials.

Since, *ceteris paribus*, possession of the needful materials must ultimately determine the extent England will forever distance the United States in the race for ship-building, and maintain her supre-

macy, if by our national legislation we suppress the production of ship-building material among ourselves.

Lack of space prevents us from saying more this month upon this interesting subject, to which, however, we may perhaps recur.
—ED.

THE IDEA OF A UNIVERSITY.—II.

FROM THE GERMAN OF PROFESSOR FRANZ HOFFMANN.

INASMUCH as philosophy must be regarded as the common soul and the inner bond which unites the whole circle of the sciences, therefore it may justly be claimed that it is this that imparts to an institution of instruction the character of a university. In the absence of philosophic culture, the Faculties could go no further than serve as institutions to fit men for the service of the Church or of the State. Never would a more advanced point of view be reached than that of a very narrow utilitarianism; never could they have broken utterly loose from those limits and set up the idea of scientific freedom. Since, then, it is only by aid of philosophy that the Faculties rise to the dignity of a university, it therefore admits of no denial that, while philosophy necessarily takes rank in the philosophic Faculty as a separate science on the same plane with all the rest, it yet holds its place also within each of the sciences, and decides upon the drift, the relative position, and the importance of them all. The old maxim, *universitas est fundata in artibus*, is in this sense correct enough, and no one will seriously contest the assertion that it is impossible to conceive of a competent university professor except as possessed of a certain degree of philosophic culture. The more profound and thorough this philosophic culture is, with so much the greater vivacity and fertility will he shape and present the special science entrusted to him; and this is as true of the several universities as it is of their several teachers. The more generally such culture is disseminated among the professors of our universities, and is recognized as the soul and the inspiration of their separate subjects of study, so much the more living, fruitful, beneficial and comprehensive will be the results of their activity. In-

dividual professors, indeed, as well as single universities, may accomplish much that is worthy of notice, much that is great and even extraordinary, without directly following any strictly philosophic tendency. We can point out in Germany many professors and some single universities which have attained distinction in this way. But who can doubt that their labors would have been far more beneficial, had they been penetrated by a more profound and genuine philosophic spirit? Have they not still come short of the highest and best results? Has not this defect been the source of very much that is shameful and hurtful? Finally, to which university would the truth and the suffrages of the learned world assign the palm so readily as to that which best succeeded in presenting every separate branch of knowledge interfused and penetrated with the Idea. But since such a treatment of the sciences in a thoroughly scientific spirit is the best possible, the universities are therefore called upon to attain to and realize it. Above all, the disinclination to philosophic inquiry and indifference to its results—a fault still commonly enough met with—must be rejected as the unpardonable sin against the life of the university. There can be no point in the kingdom of the sciences so high that the universities are excused from reaching it.

The lofty but fully authorized claim, that philosophy is the soul of the whole circle of the sciences, does not exclude, however, from a place in the universities, a group of sciences which cannot be brought into any direct relation to philosophy. But their presence furnishes no ground to reject the claim made for philosophy. It is not demanded that all the sciences be penetrated by the philosophic spirit, but that all their teachers be so.

The relation of the sciences of the other Faculties to experience and to observation is in no respect different from that of the sciences of the Faculty of philosophy. The former, that is, are clearly for the most part, at least, not mere empirical sciences, but contain a speculative element. They spring, like the general sciences, from a union of speculation and experience, or rather from an interfusion of the latter by the former. But even those sciences of the separate Faculties which in some sort are regarded as merely empirical, or of a positive or practical kind, cannot on that account be kept out of the sphere of the influence of philosophy. The mere assembling of facts reached by experience in

some one province of observation, the knowledge of a mass of fixed laws in that province, the mastery of certain rules for practical purposes—these things, however far they may be carried, are not yet a science. Such pieces of knowledge attain to the dignity of science first and chiefly through the consciousness of their inner connection, according those laws of thought in general which we clearly recognize as necessary, and those of systematic scientific culture especially. A thorough logical training is thus seen to be entirely indispensable for one who is to deal with the purely empirical, positive and practical sciences; it is easy to see, therefore, that even metaphysical culture must have exerted an important influence upon the development of the sciences; for only this culture can completely secure the experimental student against the danger of setting out to find, as based on experience, what metaphysicians know to be impossible, or at least of inferring and deriving such an absurdity from the truths given in experience. The history of the inductive sciences furnishes instances enough in which even students of empirical science, otherwise of distinguished merit, supposed that they had found that some metaphysical impossibility was really established by experiment.

Without touching on any other example of this, we may here call to mind the atomistic theory, which in spite of being shown to be impossible by the clearest metaphysical proof, and that not merely by all the prominent metaphysicians, from Aristotle to Spinoza, and by Kant, Schelling, Hegel and Baader, but also by many merely tolerable and mediocre reasoners, nevertheless is taught to this very hour in most of the physical and chemical schools of France and England, and in very many of those of Germany, either as an undeniable truth, or as in the highest degree probable, or finally, among timid minds, as an ingenious hypothesis—in all cases as possible and conceivable. Many of these teachers never once notice the fact, that even if the atomistic theory were a conceivable one, yet it could never be learned or verified by experience. Even according to their own assumption of the theory, atoms never could be recognized by the senses, and therefore could never become the subject of immediate experience. Consequently the only possible basis for this presumed atomistic system must be metaphysical. But they do not notice that in spite

of their depreciation of metaphysic, they themselves must have recourse to metaphysic, but of a very poor and stupid sort. However we are far from blaming those who use the expression "atoms" merely to designate the relative weights of different substances.

Equally positive is the influence of thorough metaphysical culture upon the treatment of these particular sciences, in that every more profound and comprehensive combination of their facts and principles presupposes an insight into the categories and laws of metaphysic, and at the same time metaphysic alone is competent to decide upon the place, importance and worth of the several sciences in relation to the whole body of them.

No one can deny that the nation is authorized and in duty bound to demand of the universities that, as the result of their instruction, every graduate shall be competent to serve society in whatever sphere of practical life he may have chosen as his own. There is, therefore, not the slightest doubt that the universities should and must subserve practical ends. The only falsehood is in seeking to sever this real use of the sciences in practical life from their true character. Wherever, as we have already said, the relation of the sciences to practical life is mastered from the stand-point of the true nature of science, there the student's capacity for practical usefulness will be more surely developed in proportion as the distinct sphere of science is grasped and apprehended in its deepest relations. All genuine practice is but the realization of the Idea. The practical man who knows nothing of the Idea, to whom it is alien and strange, can therefore rise to no higher than a subordinate rank, and his work cannot be classed as higher than the occupation of a drudge. Only he who knows is free; only he who knows the Idea is the genuine man of practice, the free co-worker in realizing its aims and therewith those of the Spirit and the truth.

The aims of that practical life to which the student desires to devote himself are those of the Idea, and therefore demand a culture which is born of the idea and in itself is truly unlimited. When we discern the fact that the relation of the sciences to the practical life is the outcome of their own essential character, we get a new light upon the true significance of those practical courses of training in the universities which among us bear the

name of "seminaries," "practical exercises," "repetitions" and "discussions." No Faculty can exclude such practical methods of training, whose purpose it is partly to give a more complete familiarity with science, and partly to serve as a foundation for the ever advancing methods of teaching the student to realize and apply the ideas and principles of the science in a manner accordant with its true character. Never, however, should these practical courses be set free from all relation to the theoretical, and allowed to thrust themselves into the foreground of university life, since this would be to put in profoundest peril the dignity of science, as well as its higher capacity for practical utility. It were a stupid proceeding, therefore, upon the part of the students, to hasten into these practical courses of study, before they had laid a soil foundation in the theoretical branches of science, and so fitted themselves to attend the former with success.

Whoever, then, looks closely at the connection of the sciences taught by the several Faculties with the philosophical studies, can no longer doubt that these latter should not be pursued merely during the earlier years assigned to them by the State, but much rather should continually accompany, interpenetrate and inspire all the other studies throughout the entire academic curriculum. For the several branches of science will only then be apprehended in their just proportions and with the thoroughness which belongs to them as mediately or immediately derived from the infinity of the Idea or as traced back to it.

True science is the basis of true mental freedom. The universities are, therefore, the homes of its cultivation. They might well fall short of being this were they merely in a one-sided way directed to the liberation and cultivation of the intellect. Freedom of mind is inconceivable without the cultivation of character; it is the unity of a culture of intellect and character. The design of the universities includes the culture of character as much as that of the mind, or, more correctly, the establishing both in their interfusion and unity. But any lack in indoctrinating philosophy is a hinderance to the stamping of character. The two flow equally from freedom and spontaneity of mental movement. Therefore the necessity of academic freedom has been recognized from the first as regards the universities, and has manifestly grown with their growth, so that it has never been possible to refuse it

recognition, not even although its proper limits have been often the subject of bitter controversy.*

But neither is this academic freedom to be confounded with unrestricted self-will, nor is it to be lost sight of that the purpose of establishing this measure of freedom can never be anything else than to meet the needs and demands of morality itself. In general it is only when these are complied with that true freedom is attained. No mere outward circumstances and arrangements can secure it to us when the spirit is absent from these; therefore, true freedom is in voluntary compliance with the demands of morality.

The formation of character cannot be postponed until the entrance upon practical life, for he who has taken upon himself the definite duties of a practical calling, has already begun the development of character. There can be no doubt, then, as to what period of life must generally witness this formation of character, if the work is ever to be done at all. All education, indeed, contributes alike to this work; but independence of character cannot be attained until the period when the youth, having outgrown the severer discipline and restrictions of his earlier years, begins to find his motives to action in his own breast, and enters upon the period of self-education. To rob the universities of academic freedom would be to rob them of the breath of life, in which alone the germs of freedom of mind and character can grow, blossom and ripen. Lads who are set loose at once from the discipline of the gymnasium to enter upon practical life, for by far the most part of their life are and remain mere mechanical puppets. A discernment of this fact has led his gracious majesty, our king, to confirm up to this hour the academic freedom of our universities. If any be disposed to regard the prohibition laid upon students of the general sciences [*i. e.*, students of the earlier years of the curriculum] from taking part in the unions of students per-

* The academic freedom here meant is the degree of self-government accorded to the students of German universities, especially during the later years of the curriculum. Education is prolonged in Germany through the years when a young American is expected to have shown his capacity for practical life, and of course the stricter discipline of our colleges would be out of place. The advantages of this freedom could only be secured with us by advancing the age of matriculation much further than at present. The self-government of students of the present colleges would be Chaos mixed up with Erebus.—*Tr*

mitted to others, as a limitation, let it be remembered that what is here forbidden only to the younger students is elsewhere forbidden to all, even the most advanced, and that the motive of the prohibition should not be lost sight of, viz., the desire to secure a gradual transition from the restraints of the gymnasium, to the full freedom of the advanced years of university life, through the comparatively free rule of the philosophic faculty.

Men who have looked deeply unto the nature of these relations, have publicly deplored the fact that the greater number of the German governments have gone so far as to forbid all union and association of students. Happily the wisdom of our gracious king has preserved our own universities from such a restriction, saving us from many inconveniences with which we would otherwise be obliged to contend.

The impulse to sociability is implanted so deeply in the nature of young men, that its natural control and government will be taken into consideration wherever the statutes of a university are wisely planned; this alone can keep it from seeking a ruinous outlet in some false direction. For in the nature of things, and in particular wherever a large body of students is united in attendance upon the same university, those that are of the same nationality will unite in especial forms of association. It is, therefore, the wise plan not to prohibit such unions at the universities. It is, indeed, worth while to ask whether unions upon some other basis, such as the intellectual profit and mental affinities of the students, might not be authorized, asking only sufficient guarantees that they shall devote themselves to lawful, moral and scientific purposes. Such permission, indeed, might be superfluous in cases where those other unions undertake to complete the reforms, which they have already begun in some quarters. We have no doubt that this will speedily be effected. The vigorous movements which we perceive in progress among the students of many of our German universities evince how clearly they already discern that a thorough reform has become a necessity. In spite of the shallow but slanderous charges urged against the universities by a Diesterweg and his fellows, it is clearly demonstrated by the most illustrious students of their history, that at no period of their history was the spirit of the universities better than at present. At all times the manner of life of the universities corresponded to the general

state of public morality. At times when coarseness of morals, customs and manners disfigured public life, it predominated at the universities also, often to a frightful extent. When this coarseness gradually disappeared from the national life, it of necessity vanished from the universities also. Equally certain is it that when the immoralities which now prevail more or less in our national life disappear, they will not be able to maintain a foothold much longer at the universities. One may be sure that the evil which actually does prevail here and there at the universities, is only the reflex of what prevails in society generally, or at least in some of its circles. But if students were to rightly estimate the importance of their position, they would see that it is not their vocation to be a mere reflex of the contemporary state of social morality, but that they are called upon to make progress in overcoming the deeply rooted immoralities, mannerisms and prejudices of their time.

As it is, what could excite deeper wonder than the strange fact that so many students are ready at once to reject (when they feel so disposed) much that can plead tradition in its favor, because it does not conform to the real or supposed principles of right reason, and yet in the very circles of society where they are at full liberty to carry out rational principles, they but rarely and not at all sufficiently or thoroughly, avail themselves of this freedom, but rather follow their cherished traditional courses, and although they often boldly undertake to censure the foremost statesmen of their time, are yet devoid of the courage to set their faces against a prejudice that has taken deep root in their own circles. But when we look back upon the great moral advance in the spirit of our universities during the last thirty years, we must take comfort to ourselves, and trust that the development of the spirit of truth and of true manliness will lead to the removal of those mischiefs, which at present more or less hinder the universities from completely realizing their lofty aims.

But how can such a noble, lofty and veracious disposition of mind be produced and confirmed without the spirit of a profound and earnest religiousness? Who that looks below the surface can avoid seeing that all so-called morality, unless it be rooted in religiousness, is hollow and worthless, poor and spiritless. Only the genuinely religious spirit is the spirit of truth, of morality and

of freedom. Among thoughtful men there can never be any lasting doubt whether religion and religiousness ought or ought not to exist, but the question that science has to clearly, profoundly and comprehensively answer is this: wherein do these consist, and what is the evidence that accredits them? The most complete answer to this question, however, can never entitle us to constrain others to accept it, or secure its triumph by violent means. A religion which thoroughly adopts the constraint of conscience as a recognized means to its support and propagation, has passed judgment upon itself and is doomed to fall. But what is rejected as a principle cannot be applied in practice, without setting oneself in opposition to the very spirit of religion. It is not enough, therefore, that we hold the true religion; we must hold it in a true religious way, and it stands immovably fast that as genuine religiousness is the inexhaustible source of good, so self-seeking is the source of all that is bad and ruinous to the universities and to all things.

[The following note in regard to the later history of the German universities, was meant by Prof. Hoffman to be appended to some part of his discourse, but as by an oversight he has failed to designate the place, we could not insert it like the others.—TR.]

Were we from this point of view to glance over the histories of the universities of Germany, we should for convenience distinguish the following periods: (1) From the foundation of the first universities to the Reformation; (2) From the Reformation to the Thirty Years' War; (3) From the Thirty Years' War to the dominance of Napoleon; (4) From the War of Liberation to the present.

Up to the Reformation the students for the most part lived in the college-houses and burses. In consequence of the great change of circumstances about the end of the fifteenth and the commencement of the sixteenth centuries—especially the revival of the sciences in Germany—the old-fashioned arrangements for distinguishing the different degrees, the conditions on which they were given, and the forms of conferring them—all closely connected with the nature of the “colleges” and “burses,”—began to appear awkward and unsuitable. The “colleges” and “burses” gradually decayed, and the students attained a larger measure of independence not merely in regard to the control and arrangement of their life at the universities, but even as regards their attention to scientific subjects. This transformation was mightily advanced by the establishment of the Gymnasias and lower schools then begun, and especially through the incorporation into their course of

teaching of the studies preparatory to the university curriculum which in good part had been at an earlier date included in that, and lastly through the now realized possibility of demanding much more from those young men who desired university distinctions. These changes were first accomplished by the universities of Protestant Germany, but after a while extended generally to those of Catholic Germany. Unfortunately, just after the period when the Protestant Universities were so largely raised in excellence by the influence of a wider and more exact acquaintance with classical antiquity, and by the vivifying spirit of the reformers, very soon, I may say, after the death of the last reformer, there came a profound decline in the character of the universities, chiefly because of a fanatical reaction of the Protestant clergy, whose members after the abolition of the authority of the Pope, were each of them quite willing to play the role of a lesser pope in his own province. This decline went on still more extensively throughout the whole period of the Thirty Years' War, and was not stopped until the commencement of the eighteenth century, when there began a new and powerful course of progress, and a greater elevation of the general status of the universities.

In that wretched period, when the spirit of the German people had sunk the deepest, single stars of the first magnitude shone unnoticed in the intellectual sky of Germany, while the Protestant clergy were striving to bind the fetters of a newly manufactured authority upon the limbs of science, and were constraining the students at their universities to swear allegiance to Aristotle with as much solemnity as to the Augsburg Confession. The greatest minds that the German nation had to show, were, like the great Keppler,* kept away from the universities, or like the great

*See *Keppler's Life and Works as Disclosed by Newly Discovered Manuscript*, edited by Baron Von Breitschwerdt, pp. 21 ss. We take the liberty of presenting in a few words Keppler's own statement of the annoyances received from the theologians of his time. "The evil," he writes to the Margrave Ernest Frederick of Baden, "which especially crushes Germany, touches especially the arrogance of some of the clergy, who would rather rule than teach. Forsooth, doctors called to the ministry of the word, would fain be bishops, and seek to subvert everything in their untimely zeal, and to mislead their princes into taking overhasty steps. The spirit of concord and mutual love is not to be found." To the Prelate John Pastorius, who had gone over to Catholicism, Keppler writes: "To the stupidity of this world I ascribe the spirit of persecution, which rules in all religious parties—the conceit which each has that its interests (and its alone) are also those of God; that salvation is its especial privilege—the assumption of the theologians that they alone have the right to interpret the Scriptures and that their interpretations must be blindly received even when they are against right reason; and finally the temerity with which they condemn every one that makes use of the freedom of the Gospel." Herr Von Schellenberg writes to Keppler: "I see into your pure soul, but others do not judge you so. Some miscall you a self-seeker, or a hypocrite, heretic, atheist." Keppler was acting, although not yet twenty-two years old, as professor of mathematics and ethics in the Gymnasium of

Leibnitz kept themselves at a distance. The Lutheran theologians at Tübingen declared the doctrine of the earth's motion around the sun to be a damnable heresy, with as much decision and emphasis as ever the Roman inquisition used in regard to it. If history does not record as revolting as instance of forced recantation as Rome employed in the case of the venerable Galileo, we may most naturally find the reason in the circumstance that they had not equal power of command. At least they put all possible hinderances in the way of the publication of Kepler's *Prodromus*, and as Mästlin assures us, they would have publicly assailed Kepler's doctrine of the earth's motion had not Kepler, to their disgust, already secured the favor of the Duke Frederick. Under the circumstances, however, they held it more advisable merely to caution Kepler not to disturb the peace of the Church.

This perverse spirit in part impressed itself upon the new foundations of universities from that time, and as the confusions that came in with the period of the Thirty Years' War perpetuated themselves, the Protestant, universities themselves sank in regard to morality—if we may trust accounts accepted even by modern Protestants such as those of Meyfort and Lotichius—below the level of the Catholic universities, which, even if they made no progress, still guarded faithfully and firmly what was good in the old system. When finally people in Germany began to see that the long-trodden paths of force of arms and constraint was in fact likely to bring their fatherland to the verge of ruin, but could never reconcile the division that had occurred in the Church in matters of faith and conviction, and when the Peace of Westphalia had secured to the various confessions to a certain degree a legal status, and when as a happy result of this pacification the heated passions of both parties had somewhat cooled, and people had learned in some measure to bear with and to

Gratz in Steiermark, when his unbiased theological views had so sorely displeased the clergy of Wurtemberg. A short time previous he had had occasion to speak out with energy against the fanatical obscurantism of the Protestants of Tübingen, who struggled with true sectarian fury against the adoption of the improved calendar of Pope Gregory and expressed themselves thus: "The object of the new calendar is clearly the spreading of popish idolatry, but the pope is just an abominable raging bear. Satan has been driven out of the Christian Church, and never shall he creep back again by help of his Vicar the Pope." Kepler writes to Mästlin, who, by order of the *Senatus Academicus* had written against the Gregorian calendar: "What is the matter with half Germany? How long will it keep itself separate from the other half of the Empire and from the rest of the continent?" For one hundred and fifty years astronomy has been demanding a reform of the calendar. Will we now forbid it? What are we waiting for? Till some *Deus ex machina* enlightens the evangelical magistracy? Many improvements have been suggested, but this that the Pope proposes is the best. It is a disgrace to Germany that it alone refuses to accept the amendment that science desires."

tolerate each other, then the Protestantism of Germany began to bring forth better fruits, and after the commencement of the eighteenth century some Protestant universities gradually rose to the possession of an important scientific and intellectual life, and this new light was kindled by their influence in other universities and at last in those of Catholic Germany, imparting an upward impulse whose effects still continue until the present day.

It was the university founded at Halle, by the Elector Frederick III. of Brandenburg, that was the first to break loose from the dominant spirit of the German universities, and awaken a freer spirit. The recentness of its foundation gave it the advantage of profiting by the experience of the other universities in regard to their internal arrangements, and by avoiding the faults of these it secured to itself a constitution so free that the cautious, yet living spirit of its professors very soon exercised the most surprising and effective influence. The chief means of this favorable change of affairs were the larger authority of teaching given to professors, the supplanting an obsolete method of teaching by a thoroughly scientific method, and finally the important stroke of raising the German language to the place of the chief instrument employed in professorial lectures—a step which involved the abolition of the exclusive use of Latin in the writings of German scholars. Philosophy especially aided in this emancipation of the national language and the national spirit, since the successor of Christian Thomasius, the philosopher Wolff, labored unweariedly to this end for a whole generation. It was this that secured to Wolff the place occupied by no previous philosopher as the teacher of all Germany, and the effects of his teachings were felt incomparably further than those of Leibnitz, who wrote mostly in Latin and French, although Wolff is not for an instant to be compared with Leibnitz in mental fertility and depth. The neighboring university of Leipsic was the first to yield to the impulse thus given, and in spite of its antiquated and manifoldly cramping arrangements, it was Leipsic that completed the victory for the emancipation of the German language and the German spirit, and contributed most to purifying and ennobling the German vocabulary and style. Among others, the university founded in 1734 at Göttingen pressed forward in the upward path opened by Halle, and under cover of specially favorable circumstances rose to a standing which surpassed that of Halle. Yet this university always remained more devoted to the empirical and positive sciences, and was thus incapacitated from being a true representative of an intellectual culture genuinely German. These examples were followed by a whole series of the remaining universities, and the impulse was also propagated in a number of Catholic universities, among which our Würzburg took an important rank. Kant raised Königsberg to high honor during the

second half of last century. The Kantian philosophy excited the liveliest interest in philosophic studies in all the German universities, and philosophy began more than ever to interpenetrate the positive sciences and to transform them by its inspirations, while the Catholic universities could only follow this impulse and emulate its authors; yet to Wurzburg above all others belongs the honor of following with a lively zeal. Just before the end of last century the university of Jena was organized, in one of the little Saxon principalities, by a concurrence of favorable circumstances, and with but scanty provision and apparatus. For the time it was one of the best attended in all Germany, being the center from which a number of professors and writers of distinction and genius delighted the nation; their work represented, in the variety of its drifts, the very pith of the intellectual life of Germany.

Ernest Reinhold, who developed the Kantian philosophy, a noble, intellectual and courageous spirit, who is too much neglected in our days, was called to Kiel, after he had, by his highly suggestive philosophic lectures at Jena, broken ground for a rich sowing of philosophic seed. He was succeeded by the genial thinker, the great character, the fiery friend of man and of his own nation, and one of the greatest hero-masters of the academic style that Germany or, perhaps, the world has ever produced—John Gottlieb Fichte, who came forward with the beginnings of a new system of philosophy, which its author as yet regarded merely as the complement of that of Kant. The stir that Fichte produced was extraordinary, and extended from Jena to other universities. He stood in lively intellectual intercourse with a host of brilliant minds, some of whom were found in his immediate society, others in the neighborhood—Goethe, Schiller, Jacobi, Reinhold, William von Humboldt, Frederick Schlegel, Novalis, Tieck, etc. Among his scholars he numbered a series of young men who afterward took rank as able, some of them as remarkable, writers and professors—Herbart, J. J. Wagner, etc., etc.

Hateful and fanatical insinuations, unhappy misunderstandings, and a gruff and obstinate manner that rested on his unlimited love of the truth, soon brought Fichte's activity at Jena to its close, and some years later the military disasters that burst upon Germany and Prussia scattered the powerful and illustrious minds, that had been assembled there, until with the liberation of Germany there again awakened at Jena a new intellectual life.

In the midst of the profoundest humiliations and the greatest disasters, the lofty monarch of Prussia formed the purpose to which he was advised by men of the greatest distinction, of founding a new Prussian university in the capital—Berlin. A deputation from Professors of the University of Halle, which in 1806 had been abolished by Napoleon, in 1807 laid before his majesty, who

was then staying at Memel, a petition for the establishment of such a school, and two years later it was granted. The lectures were already begun by 1810, the most distinguished professors having been sought out for the purpose. William von Humboldt was intrusted with the work of planning the new organization, and discharged the principal points of the trust in a superior manner.

Since the liberation of Germany the university of Berlin has risen to the place of the greatest and the most important in Germany, through the concurrence of many favorable circumstances, internal and external—the wealth of educational apparatus which Berlin as the capital of Prussia furnishes, the abundant endowment and the excellent gifts and collections, the appointments and invitations extended to a great number of the most illustrious scholars in all departments, and an organization under the special patronage of the king, in all essential points, excellent. Since the War of Liberation the German universities have made progress in nearly every respect, and furnish a by no means disagreeable picture of the culture of the nation. Munich, founded by his gracious majesty our king, sprang at the very start to a stirring and progressive intellectual life, which has been most zealously cherished by a great number of distinguished professors, including minds of the first order. Other universities, such as Tübingen and Leipzig, have undergone alterations of various sorts to adapt them to the present age, and the greater number are in a flourishing condition.

THE LAWS AS TO THE WORK OF CHILDREN IN MANUFACTORIES IN EUROPE.*

BY EUGENE D'EICHTHAL.

LET us now return to France. In 1837, when the government and the chamber of deputies began the consideration of the condition of children employed in manufactories, the number of young workers was already considerable. At that epoch the cotton manufacture alone, out of 900,000 workmen, employed from 100,000 to 150,000 children between seven and fourteen years, and Villerme mentions a cotton mill in Normandy in which of one hundred employees there were only twenty-two above the age of sixteen years. It was in one of the manufacturing cities where the larger number of children were employed, that public attention was, for the first time, drawn by the manu-

* Translated from the *Revue des Deux Mondes*, by O. H. K.

facturers themselves, to the deplorable effects produced on children and youth by the excessive fatigues of labor. As early as 1827, M. Jean Jacques Bourcart read a paper on the evil, before the "Industrial Society of Muhlhausen," in which he, with other manufacturers, demanded a law which should limit the working-day of children. This first appeal soon found an echo in Alsace, and for the next ten years, reports and petitions were made in the provinces of both the Upper and Lower Rhine, and addressed sometimes to the chambers of deputies, and sometimes to the "Academy of Sciences." By this persistence, public opinion was at last aroused, and in 1837, the government began a searching inquiry into the subject; and addressed interrogatories to the chambers of commerce, and to the city councils, the result of which was that children generally remained in the factories from thirteen to fourteen and one-half hours: one and one-half hours being devoted to meals; that they began working as early as six or seven years of age in some of the departments of the North, the Upper and Lower Rhine, and Lower Seine, the minimum age being, however, generally eight or nine years; that the children frequently worked under the most unfavorable conditions; factories were mentioned as at great distances from the centers of population, so that children, badly clothed and poorly fed, had frequently to walk, as early as five o'clock in the morning, two leagues through the mud and snow, and as much at night again; that it was absolutely impossible to give any instruction to people so utterly worn out, both in mind and body. Petitions extensively signed showed that bad treatment and blows were of frequent, and in some localities, almost constant occurrence; and Villermé described the factory children as "pale, weak, slow in their movements, showing a picture of wretchedness, suffering and prostration, in striking contrast with the bright color, plumpness and activity to be noticed among children of the same age in the agricultural districts."

There was great unanimity as to the gravity of the evil, but it ceased on the question of remedy; some were in favor of a general law, while others wished regulations varying in the different localities. But at length, after long debates, in 1841, a law was passed which is still in force, and which forbade the admission of children under eight years of age; from eight to twelve years,

limited the day's work to eight hours, to be divided by a rest ; from twelve to sixteen years, the maximum work-day was to be twelve hours ; night work was forbidden for all under thirteen years, and from thirteen to sixteen years, except in certain establishments, where it was authorized by special measures ; and Sunday work was forbidden for both classes. The regulations as to school instruction were remarkable for the times. "No child of less than twelve years of age shall be admitted to a factory, unless his parents or guardians certify that he attends regularly one of the public or private schools of the neighborhood. Children of more than twelve years of age shall be permitted to dispense with going to school when the school-master has given them a certificate of having received elementary instruction."

But this was not found to accomplish the desired ends, so in 1847 an attempt was made to carry out the English plan of salaried inspectors. This was adopted by the government, but the Revolution of 1848 put an end to it, and though great endeavors have been made, nothing has been accomplished, and the law of 1841, with its defects, want of sanction, etc., remains in force.

Within a short time, however, a project has been introduced by M. Joubert, one of the deputies, under which a commission has been appointed, which has made a report, introducing many reforms. It extends the action of the law to small workshops ; changes the minimum age of admission from eight to ten years ; limits the day's work for children under thirteen years to six hours ; compels instruction, public or private, up to thirteen years ; and to give the law life, provides for salaried inspectors, chosen by a board of supervisors appointed by the government.*

*The article was so long and went so minutely into the consideration of this report, that we have concluded to print merely the above abstract, and refer the reader desirous of studying the subject to the original in the number for July 15th, 1872. [Ed.]

In the various States of the Union the provisions vary ; but in nearly all, the law prohibits the employment of children under ten years. Rhode Island and Massachusetts put the limit at twelve, and Pennsylvania at thirteen years. In several there is a special limitation of the period of youth, during which attendance at school is a prerequisite ; in Massachusetts and most of the other States, this period lasts until fifteen, but in Connecticut it is stretched to eighteen, the requisite schooling varying from three months to eighteen weeks. The day's work is generally ten hours during this period, but in Rhode Island it is eleven—between five A. M. and half-past seven P. M., and in Connecticut twelve hours, though there they must not work more than sixty-nine hours a week. There being no general law in force over the whole country, there is, of course, no government inspector, but the sanction is furnished by making the parents or guardians of the children, and also the employers, punishable by fine, and sometimes by imprisonment, complaint being generally made before a Justice of the Peace. [Ed.]

DON QUIXOTE AND GIL BLAS.

TO most men the reading of a good novel occasionally, in intervals of more serious reading, is like rest after labor; and to many it is perhaps more than this. A good novel may, in some sort, take the place of a sermon, even to him who never cares to listen to one from the pulpit. It may be a moral treatise to him by whom a book on ethics would be the last book likely to be read. And it may also, in a measure, take the place of history and philosophy; and possibly even—for the tendency of the times seems to indicate that the scientific novel may not be far distant—of science, to those who care only to skim the surface of these things. So, then, the novel is no longer merely a story, for it has become theological, ethical, historical, philosophical, and may be scientific; and is the royal road, as it were, to an attainment of a smattering of knowledge of almost all things under the sun. To say then that the novel has become a very powerful influence in society, is to utter a truism, and one which it is not my purpose to elaborate. My only object in this introduction is to furnish a reason for endeavoring to produce intellectual corn in any degree likely to be nutritious mental pabulum from such old and all but exhausted soil as that of those Spanish and French fields whose names furnish the title of this paper.

It may seem somewhat too bold an assertion when I state, that in my judgment *Don Quixote* is the first of novels in the point of time, and the foremost in its class; and *Gil Blas* while ranking below the former, is yet the first of another class of imaginative literature.

What I mean by these two classes of novels, I shall endeavor to explain.

The child's first observations are all of objective nature—he knows only what presents itself to him in a concrete form. In this he is like one of the lower order of animals, whose power of observing external things is as great as that of man and frequently much more so, but whose mental processes never get beyond perceptions. But very soon, how soon I suppose no one can tell, their perceptions are put together, and concepts result and thus a sort of

subjective process is formed of the lowest and most external kind. And as the child grows older his subjective ideas grow more and more important, until he has formed for himself some sort of general thing, a philosophy about life and its ordinary cares and duties, such as are commonly presented to him. But external nature is strong in its influence, and very few are able wholly to forget it so that it shall not most powerfully effect all the thoughts and feelings. Those who do—who travel toward themselves, and so onward to the great source of life and light—for what little knowledge of the Infinite we are capable of, lies through and beyond the knowledge of ourselves—are the true thinkers, the true philosophers. It is true of philosophy as of all other earthly things, that the best is capable of the most abuse, and so this very idea which I hold to be indisputable, that subjective things are the real, and objective things are merely their plastic outward clothing changing with them, and owing everything of truth and beauty which they have to that inward life, has fallen into the slough of subjective idealism, and this into the most dreary nihilism. Between this dreadful philosophy and that true idealism, the true philosophy of the subjective, the difference is as great as the difference between truth and falsity. The application of subjectivism to religion is one not difficult to make. In the spirit of true religious subjectivism there have been numb souls who could earnestly say—

“O God within so close to me,
That every thought is plain,
Be Judge, be Friend, be Father still,
And in Thy heaven reign!

In its application to morals, subjectivism has given rise to the purest system of ethics, outside of Christianity, which has ever existed among men, that of the stoics, as found in Marcus Aurelius, and Epictetus. In the true spirit of the philosophy which teaches us to regard the internal and not the external, to believe that if we take care of that which is within our power—namely, ourselves—other things are of little account, Epictetus says: “If any of you, withdrawing himself from externals, turns to his own will, to train and perfect, and render it conformable to nature, noble, free, unrestrained, unhindered, faithful, humble; if he hath learnt too, that whoever desires to shun things beyond his own

power, can neither be faithful nor free, but must necessarily take his chance with them, must necessarily be subject to others, to such as can procure or prevent what he desires or shuns; if rising in the morning he observes and keeps to these rules, and to every subject of action applies the same fixed principles—this is he who hath not labored in vain."

I fear I may have strayed somewhat from the road, but my object in these general reflections is to suggest that the best thought in all things is the inward rather than the outward. He who takes the former view of things is likely to be the deeper thinker, the truer philosopher, and to have a better basis for his moral and religious life, than he who looks at things from the latter standpoint merely. This same principle I conceive can be applied as well to literature as to the other great matters to which I have alluded. But few authors have been creators. Those who have created have been, to use a remark of Carlyle, founded on one of Goethe, creators from without inward, like Scott, rather than from within outward, like Shakespeare. It is the latter class, although in number very few, those who make us know a person from the description of the inner, the real man, stripped of all accidental accessories of time or country, dress or rank, who must be placed highest among the creators; that is, those who have given to the world such a description of character as genius alone can produce, and which requires but little imagination on the part of the reader thereof to make it seem to him as if, clothed in the flesh, the creation of genius had actually been seen by him, and had talked and acted in his very presence. So then, I would divide imaginative writers broadly into two great classes, corresponding to the division of Carlyle, the first such as *Æschylus* and Shakespeare; the second like *Virgil* or Scott. These again I should divide into several classes, the first mainly on subjective, the latter on objective grounds. But without considering the several divisions into which these general classes might be divided, it will be enough for our present purpose to place in the first rank of the former class those who seem, by study, experience or intuition, or perhaps by a fortunate combination of all these, to have acquired such a knowledge of human nature in all its phases, of the high and the low, the rich and the poor, old and young, and all intermediate classes, and of both men and women, that their works never have

nor ever shall grow old, but are as fresh when centuries have passed, as the day the world saw them separated from the author's mind. Such writers are very seldom found; beyond Shakespeare and Goethe I hardly know another. Thackeray might be placed in this class, had he ever attempted to present to the world a man for whom one might have genuine sympathy and respect, but as it is he has given to us but one-half and that the worse. But the next in rank of this class, which for want of a better term I will call the subjective writers, are very numerous. They are those namely, who, while not attempting to present a universal view of human nature, or even one tolerably complete, yet in one or two, or perhaps more characters, exquisitely finished, have given to us so many persons which seem almost living, and which can, so far as this may go, take rank among the men and women presented to us by the princes of imaginative literature. These have not, it is true, been able to look at all sides of this wonderfully complex total of humanity, but they have seen more sides of it than most men, and what they have seen they can embody in concrete form, which shall, so far as words can make them, live and walk before us. Such a one is Milton's Lucifer, a terribly subjective creation, who needs no help of anything external to make him seem real, and as perfect in his kind as anything of Shakespeare.

The merely sublime cannot, however, always interest. Icarus soared high, but the sun at length melted his wings, and his fall to the earth was both speedy and destructive; and he who in borrowed wings long attempts to keep above the common earth, shall find his fatuous pinions will prove a frail support; and so those who have nothing but the sublime, will be apt at length to find that they degenerate into the nonsensical, unless a genius like Milton guides the pen. And if in poetry the sublime cannot always be maintained without either weariness to the reader, or a descent to bathos, still more in romantic literature, in novels, do we need to have much more, or rather many other things. Thus Sydney's "*Arcadia*," with its endless pastoral conversations, wearies after a while the most patient readers. Not only do we need in this class of works a finished character, but several of them, so that the drama of life shall, in miniature, to the extent of an act or two, be played before us; and these, displayed in scenes of somewhat lively incident, will give to us, I think, a novel such

as shall possess some merit in literature. The division above spoken of will apply of course to this branch of imaginative literature, but I do not know of any novelist who can take rank as first in the subjective class; but in the second rank, I would certainly place among the foremost, if not before all, Cervantes; and as one of first of the objective class, Le Sage.

The most evident criticism which may be made respecting the two works by which, respectively, the great novelists whom I have named are chiefly known, and on which their reputation in the main depends, namely, "Don Quixote" and "Gil Blas," is that they have scarce anything of a plot in the modern sense of the term. A novel nowadays, or for the last hundred years, must have a plot as sharply drawn, and almost as lively in action as a drama, and everything in the story must tend to the development of this plot. Such a plan of constructing a novel has at least the merit of keeping the reader's interest for the *denouement* pretty well excited, so that the writer must be tolerably expert in his art. And he must be a poor writer indeed, or have been very unfortunate in the selection of a plot, who cannot keep his readers tolerably interested in the story to its end. But in "Don Quixote" and "Gil Blas" the plot is of the smallest kind.

In the former it is merely the somewhat humorous adventures of a gentleman who by much reading of books of chivalry has so far turned his head that he sallies forth as a knight-errant; and in the latter we have the life of an adventurer, who, from a small beginning, after a great variety of strange adventures, at length acquires riches and honor. I cannot help thinking this kind of novel (among the old romance writers the most common, indeed, if we except the Italian "Novelli," and a very few others, the only sort of story) to be constructed on the better plan. A plot is almost always a distorted view of life. We seldom see anything like it in our own experience. Indeed, we may see that the plot is the most artificial of contrivances, in which frequently not only is probability left out of sight, but reason is even outraged. But in stories such as *Don Quixote* and *Gil Blas*, we have a section, as it were, of an actual life. Here are, in the main, only incidents of the ordinary sort; but yet their very naturalness makes them attractive. When the plot of a story, in which it furnishes the only or chief point of interest, has become known, when we know "how

it is coming out," as the phrase is, the rest is apt to be vapid and insipid. But in the other case we shall always find it interesting, if the writer has been tolerably faithful to his work. I do not forget that a writer of genius may so vivify his work that it will never grow old, whatever the plan of it may be. For genius will make even a bad plan seem to be a good one; and thus Scott's novels, all of which have plots more or less involved, will, I believe, be read as long as our language lasts. But as illustrations of what a great writer may do in these two kinds of novels, I need only refer to "*Pickwick*" and "*David Copperfield*," two novels in which the plot is next to nothing; as compared with "*Bleak House*" and "*Great Expectations*," in both of which the story is quite closely confined to the plot. I think the two former decidedly among the best; and the latter among the poorest of this distinguished writer's works.

I have called "*Don Quixote*" a subjective novel, and thus one of a higher kind than "*Gil Blas*," which I class an objective one; for this reason: in *Don Quixote* the central point, the life of the story, is the portrayal of two characters, which are as finished, I do not hesitate to say, as anything which I know of in literature. And our conception of them is mainly based on what—if I may so speak—they tell us themselves. It needs not one single incident or adventure to show us what the character of *Don Quixote* or of *Sancho Panza* is. The adventures which they meet with, humorous and inimitable as they are, might all be stricken from the works, and we should have two tolerably finished persons before us. And this is done, to use Goethe's expression, "from within outward." They tell us themselves their stories, their dispositions, and idiosyncrasies, and when the adventures come, we know almost beforehand how each will act, and what each will do. Does any one doubt, for example, that when the keeper of the African lions, sent as a present to the King of Spain, is met on the road with his disagreeable charges in their cage, that *Don Quixote* will boldly advance with sword in hand to engage in fight with them, or that *Sancho* will take to his heels? But in the case of *Gil Blas* it is different. Here everything obtains its interest from the incidents of the story, that is, its machinery. We know not, nor can hardly guess, until after a long acquaintance with the hero of the story, how *Gil Blas* will act under

given circumstances. We find out his character only from the outward incidents, and none of them can be spared and leave Gil Blas as we now have him. Without attempting to elaborate upon a point which I hope is sufficiently plain, I will only add that what I have been aiming at is to make understood the division of imaginative literature into the two classes above named.

To us at this day, that which made Don Quixote so popular when it was first published, the ridicule which it cast upon the absurd books of chivalry then in vogue, is not of the slightest interest. But the book can spare this and not become in the least degree obsolete. And this is one of the highest tests of genius; when a book written for a temporary purpose can outlive that, and by its own inherent merit, with no help from extraneous aids of time or local prejudice, survive not only through many generations, but among many different peoples. This merit Gil Blas shares somewhat with Don Quixote. But as the former had no special purpose to serve, unless it was to put money in the purse of its writer, so it could more easily shake off the artificial apparel, which first adorns and then impedes, of adaptation to a particular class of readers and a particular age. Thus both have become books for all times and all nations. I have barely alluded to the exquisite portrayal of character in Don Quixote, because the limits of this article will not permit me to do more; but this should be mentioned, that in spite of the follies to which his insanities drive him, we never forget that its hero is a gentleman by birth, breeding and natural instincts. He commits innumerable absurdities, but he never does an ungentlemanly thing. He ever remembers to fear God, reverence the king, do what he thinks his duty manfully, and he never forgets that he is a gentleman of an old Castilian family. It may be that the race of gentlemen is to die out; this is not the place to discuss that question, but if it be so, let us hope that some of the old *hidalgo's* sentiment may remain, for it should be current "coin of the realm," always and everywhere.

Gil Blas, on the contrary, is not a gentleman, but a mere adventurer. He furbishes himself up at times, to be sure, and passes himself off for a tolerably fair specimen of one for a while, but the varnish wears off, and the vulgar man stands confessed. For the former we always have respect, as well as pity, even while we

laugh ; for the latter, though we may sometimes pity, and with him frequently sympathize, yet we never feel respect for him.

A good novel should not be all didactic, where it is not relating adventures; not even philosophic, except now and then; and therefore it needs some wit, and somewhat of humor, to enliven what might otherwise be too dull, to furnish what a good novelist must never forget to put in his bill of fare—entertainment. To know the difference between wit and humor, on the one hand, and coarseness and buffoonery on the other, is a most important qualification of the novelist. To say that Cervantes and Le Sage possessed them in an equal degree would be saying too much ; but this at least may be said, I think, that the latter is seldom excelled by any writer in this particular, except by the former, and he scarce ever by any one. The examples of this in *Gil Blas* are many ; let me mention the affair of the ruby from the Phillipine Islands, the prescriptions of Dr. Sangrado, the legacy of *Gil Blas* from the canon ; and the advice to the Archbishop of Seville. But those in *Don Quixote* are so many and all so good that a choice is most difficult. For pure wit, however, let me allude to Sancho's device of the reported enchantment of Dulcinea, to escape from the trouble of searching for her ; and for humor refer to his story of the merit of two members of his family as wine-tasters, and to the various adventures which happened to that worthy during his governorship of Barataria. I have said that *Don Quixote* is the first of novels in the point of time, and *Gil Blas* the next. In saying this I do not forget the ancient romances, such as those of Apollodorus, Tatiüs, Achilles Longus, or Apuleius ; nor the mediæval "Arabian nights," the Arthurian romances, the balladists, and the ridiculous stories of chivalry current in the sixteenth century. For these can in no sense be called novels in our modern use of the word. They are simply stories told in a more or less lively way, with little reference to human experience in their incidents, burdened commonly with the supernatural, or the ridiculously impossible, and having little claim to bear any resemblance to actual human life. I may be referred perhaps to Boccaccio's *Decameron*, and Margaret of Navarre's *Heptameron*. Certainly one cannot object to either of these on the ground of unnaturalness. I know not where to look for more exact pictures of human life than there. As faithful

transmitters of the manners of the times, and as compared with many modern novels, pretty truthful too in their representations of character and life, they are almost as an object-glass of a telescope, upon which an accomplished optician has spent months of labor, compared to a very ordinary field-glass.

But the point of difference is just there; they are only faithful representation of what actually happened—little bits of mental scenery, if I may so speak, photographed and exquisitely painted from the life and on the spot, by those who know only how to present the actual. They are in fact, compared with the novels of to-day, as the photographer to the painter. The former gives us the actual, but art I conceive ought to be able to tell us of the things "which never were on land or on the sea," and yet so inherently probable that no one truth of nature is misrepresented thereby; that is, nature idealized and glorified. Nature is plastic under the hands of man, and its outward beauty it is the business of true art to make plastic before that inner spiritual creative power which the Creator has given to man only. Thus, then, I mean to say that the novel, while it is not a history of whatever was, yet is a representation of what might very well have been. In this sense *Don Quixote* is certainly before all others. The earlier dramatists it is true—Greene, Marlow, and one or two others of lesser note—had preceded him but only by a few years, and these in another field of imaginative literature. They wrote for the ear; Cervantes for the eye. The work of the latter is as new and as complete as that of the former. Shakespeare, it is pretty well proved, was a reader of *Don Quixote*, and I believe this work must have had a considerable influence upon the great philosopher of human nature. Here are two purely subjective creations, *Don Quixote* and *Sancho*, whose naturalness we to-day, removed from their creation by more than two centuries and a half of time, and in a nation differing in most essential respects from that of his, acknowledge as beyond all question. The philosophy, the worldly wisdom, the wit, the humor, the pathos even, of Cervantes, instruct, amuse and soften as much; as pleasantly, as keenly, as if the book containing them were written in our day and for our people. *Gil Blas*, too, is entitled to something of the same praise; but take from the book the external scenes, the adventures of its hero, and the rest could hardly live a generation.

Yet in the book as it stands, we have a novel which is foremost among those of the objective class.

To these two fountains, as it were, in the generations since their appearance, the novel writer, the man of affairs, and the mere seeker of entertainment, have continually come, and in their waters each has found, as each shall find, I believe, for many generations to come, what he has sought, or shall seek,—instruction for the one, shrewd practical wisdom for another, and entertainment for the third.

CHARLES H. DREW.

THE RACE OR THE HYBRID.

ONE of those difficult questions upon which the popular mind is almost made up, and wrongly, is whether or not the commingling and blending of different races of men tend to produce a new class, stronger in all social respects than either of the original elements. An American who looks carelessly over the manifold types of national character that coexist in the United States, and are gradually fusing into political unity, is naturally tempted to infer that such a blending of races can accomplish nothing but good. An equally superficial view of the history of Europe furnishes him with many cases that seem to confirm an opinion so flattering to his hopes for an illustrious future for his own nation. If he have not learned modesty in the matter of forming and holding opinions—and that is certainly not an American virtue—he comes gradually to regard the view as axiomatic, and is hardly staggered even by some bold advocate of “miscegenation,” who wishes to see the marble whiteness of the national statue of liberty turned to a rich bronze.

Has the opinion any foundation in the discoveries of physical science? The vegetable kingdom, from the nature of the case, can furnish us with no analogies. Our experience of the animal kingdom suggests that hybrids are likely to possess the showy qualities which attract for a time or perhaps for a few generations, but are lacking in the *stamina vite* which perpetuate a stock for long ages. To the eye of a connoisseur the pure-blooded puppy is always handsome, while an inexperienced always prefers the glossy skin, and

more graceful shape of the young mongrel; when the two are grown to full size, the tastes of both judges coincide.

The antipathies which nature has implanted in man and in the lower animals, seem to teach the same lesson. By these invisible walls of fear and horror does she guard the purity of every genus in her wide domain. We miss her meaning when we associate these merely with hostility and proscription. Her work is to develop the single type to its full perfection. "Nature," says Knox, "respects the race and abhors the hybrid."

Anthropologists of the most candid type reject the popular view as absurd. They point out the inferiority of the mulatto, the mestizo and the zambo to either of the pure races whose blood is commingled in them. These human hybrids are passionate, fierce, devoid of strength, incapable of founding a stock of vitality and permanence. Agassiz watched the different classes very closely while in Brazil, and reached a conclusion very decidedly opposed to the popular view.

But history is the great evidence for the popular opinion. When we look below the surface of events, history tells us another tale. Nowhere has the antipathy of type to type, of genus to genus played a more important role. We see the instinct in full force already in the patriarchal age. Abraham must have a wife for his son from the maidens of his own land, and Rebekah is equally concerned for Jacob. The sons of Jacob will not marry their sister to the Prince of Shechem. On the other hand the fact that Esau and Ishmael make their choice from among the Hamites, marks them to the Mosaic analyst as retrograde, and ethnology affirms his verdict.

Rome, we are told, owed much of her wonderful vitality to the union of different races in her city. We admit the fact so far as union is meant. Rome was a composite city, made up of a classical tribe and a Celtic one. The former was of the same stock as the Greeks and the Albanians, and seems to have formed the substratum of Roman society. The latter was a Sabine tribe, who most probably conquered the old Latin Romans in the early and obscure ages of Roman history, and occupied the same relation to them that the Normans did to the Saxons. Parallel to the amusing string of philological facts that Sir Walter Scott puts into the mouth of the swineherd in *Ivanhoe*, is the fact that all the military

and political terms in the Latin language are of Celtic origin, and have close analogies in the Irish or the Gaelic languages. These Sabine Celts belonged to the Gaelic and not to the Cymric branch of the Celtic family, which latter includes the old Breton and Cornish and the Welsh languages.

The union of the two tribes seems to have contributed very largely to the prosperity of the Roman Commonwealth, but not (be it noted) their blending. They never did intermarry freely. It was ages before any marriage between a Celtic patrician and a Latin plebeian was permitted and acknowledged as valid. The struggle to secure the right of intermarriage for the plebs went on for centuries. Arnold and Niebuhr looking at the matter from the point of view of liberal politicians, utterly lose sight of the ethnological basis of the controversy. It was not mere patrician pride and insolence that prolonged the opposition ; it was nature striving for the life of the community whose peculiar strength, secured by union but sure to be destroyed by miscegenation, was to rule and legislate for the world.

Look again at the whole historical relation of the two first waves of the Indo-Germanic immigration, whose history is the history of the modern world. The long line that divides them runs from the Alps of Switzerland down the Rhine valley to the German Ocean. That line has seen more great battles, from the days of Julius Cæsar to those of Wellington and Von Moltke, than any other in the whole world. Nay, the struggle antedates Julius Cæsar by whole centuries. The Celtic race must once have spread over all central Europe, and must have been driven westward with severe struggles by the advance of the second or Germanic wave. The line we have traced has been the boundary in historic times, but Cæsar discloses the fact that it had been the scene of sharp fighting before his time, and that the Germans had often crossed it.

All these struggles have but coöperated with nature in deepening the line of demarkation between the two races. To natural antipathy and the distinctions of manners, mental habits and languages, have been added the memory of mutual wrongs and hereditary hatreds. Even Bismarck serves beneficent ends in his domineering ; he helps to keep that line drawn deeply. A hybrid Alsatia or Lorraine, or a half-hybrid Belgium or Luxemburg, is all

that is in danger of forgetting on which side of the boundary it lies. These may be the prize of one victor or another, with no great loss or gain on either side, but the great race continent is not compromised by the fate of these outlying islands. Nature reveals her most secret laws in her violent struggles to preserve them unbroken.

"But there is England, the land of mixtures and race hybrids, no instance of the weakness of such admixtures surely. Defoe said in his wrath, 'The Englishman is the mud of all races.' Emerson says: 'This people seem to be of no one stem, but collectively a better race than any from which they are derived. * * * They derive their pedigree from such a range of nationalities that there needs sea-room and land-room to unfold the varieties of talent and character. * * * The island was a prize for the best race. Each of the dominant races tried its fortune in turn. The Phœnician, the Celt and the Goth had already got in. The Roman came, but in the very day when his fortune culminated. He looked in the eyes of a new people that was to supplant his own. He disembarked his legions, erected his camps and towers—presently he heard bad news from Italy, and worse and worse every year; at last he made a handsome compliment of roads and walls, and departed. But the Saxon seriously settled in the land, builded, tilled, fished and traded, with German truth and adhesiveness. The Dane came and divided with him. Last of all the Norman or French Dane arrived and formally conquered, harried and ruled the kingdom. A century later it came out that the Saxon had the most bottom and longevity, had managed to make the victor speak the language and accept the law and usage of the victim; forced the Baron to dictate Saxon terms to Norman kings; and step by step got all the essential securities of civil liberty invented and confirmed.'"

All undeniable, of course, and one great secret of England's strength, but no argument for the miscegenation of races. These different races have their distinct habitats in England, and have kept substantially apart from each other throughout all centuries. In the south and the center, thrusting up in wedge fashion to Nottingham, lie the various low Dutch and German tribes—Jutes, Angles, Frisians and Saxons, the latter forming the apex of the wedge. From their territory to the Scottish Highlands the

whole country excepting the western coast is occupied by the Norse race. Along the west coast—Cornwall, Wales, Cheshire, Cumberland (Cymry land), Westmoreland and Galloway—lie the Celtic race, which again occupies the island from Stirling and Dumbarton to the northern coast. In Lancashire and in Ayrshire the Celtic west line is now broken, and by another anomaly farther south, Devonshire, which ought to be Celtic, or at most Saxon, is Norse. The last race that occupied Britain, the Normans, have preserved their isolation, and consequently their distinctive vitality, by social usages and traditions as constituting the aristocracy. In some parts of Ireland they form a larger proportion of the whole population than in England, but by becoming assimilated to the mass of the people, and blended with them as in Normandy, they have lost their importance and significance. Thus the whole ethnological phenomena of the British Islands confirm our main thesis, that the union of different races without their blending, is the chief source of the strength of a composite nation.

Ours is such a nation, and most persons have very little idea of the distinctness with which different nationalities have kept up their old boundary lines. In Pennsylvania, for instance, the German element never mingled with the Scotch-Irish or the English elements. Where the former have overflowed into any Pennsylvanian valley, the latter have one by one left it. There are fine and well-endowed Presbyterian churches in some of our valleys in the center of the State, where not half a dozen English-speaking hearers can now be gathered to worship. So again Quaker districts have been abandoned to the closely affiliated sect of the Mennonites, the latter buying the place up farm by farm. "Thy people mean to root us out, do they?" said a Friend to a wealthy Mennonite preacher, to whom he had just sold his farm; "Well, thou hast paid the full price for thy *root* this time." The present writer saw exactly the same process going on in the part of Illinois that lies near to St. Louis. Whole townships were designated to him as having passed into German hands out of those of their former owners within ten years.

So again this wholesome tendency to the isolation of races is seen in united emigration. The Scotch-Irish of South and North Carolina, who would not reconcile their consciences to slavery,

came North in groups, and are now settled in a few localities in the Western States. The same stock in their very extensive immigration into this country during the whole of last century, chose settlements contiguous to each other, especially on each side of the boundary between Maine and New Hampshire, and in the valleys of the great Apalachian system, from the present Oil Regions of Pennsylvania to the Muscle Shoals of northern Alabama. From these two *habitats* of the stock have come forth nearly all their able leaders, who have played a notable part in the history of the nation.

So again with even the movements of New Englanders westward. They generally advance along the parallels of latitude, and settle in groups and districts like the Western Reserve of Ohio. They have occupied large quarters of many of our Western States, *e. g.*, Michigan, Wisconsin, Iowa, Minnesota and Kansas. On an Illinois prairie you will find two "cities" within an easy ride of each other, the one thoroughly Yankee, the other thoroughly Scotch-Irish. The society, the churches, the mental habits, the Mrs. Grundy of the two places, will be utterly different, and each will be seen to entertain no small contempt for the other. No amount of Christian charity has extinguished the wholesome antipathies by which nature cherishes her types of mind character.

Are we to despair of a complete and thorough union of the whole nation because of these differences which we suppose to be ineradicable? By no means; these are no enemies to a real unity of the nation, but rather its aids and subsidiary forces. We should rather fear the miscegenation that wipes them out, and so impoverishes the national life. What Paul says of the Church is true of the State: "The whole body is not one member, but many. * * The whole body (is) fitly joined together and compacted by that which every part supplieth, and according to the effectual working in the measure of every part." Goethe reproduces the idea in the terminology of modern science: "The more imperfect a being the more do its parts resemble each other, and the more does each of its parts resemble the whole. The more perfect a being the greater the dissimilarity of its parts. In the former case the parts are more or less a repetition of the whole; in the latter they are totally unlike it." To take away the variety and the individuality of type out of the nation's life is not to strengthen the natural

unity, but the reverse. Each of these race elements that we have inherited from the Old world has its own part to play in the nation's history, in ways that we as yet but faintly discern. A philosophical study of the history of the United States, by a man of large views and catholic mind, would disclose the fact that these differences had already played an important and beneficial part in our history.

Our chief danger is that they will be obliterated and forgotten ; all our tendencies are in that direction. Our geographical conformation promotes assimilation. Our mountain ranges cross the parallels, while those of the Old world cross the meridians—a circumstance that tends to assimilate into a single type the various types of life and manners that have grown up in the millenniums of the past, under distinct climatic influences.

In sum, not miscegenation, but unity is variety. Nature respects the race, not the hybrid.

JOHN DYER.

CENSUS OR NON-CENSUS.

"The census, it is said, embraces 17,000,000 women : who would not be a census?"—*Exchange*.

"Mercy on me ; what a multitude is here!"—*Henry VIII., Act 5, sc. 3.*

"Your commission will tie you to the numbers and the time of their dispatch."—*Cymbeline, Act 3, sc. 4.*

"But now 'tis odds beyond arithmetic."—*Coriolanus, Act 3, sc. 1.*

"Lest this great sea of joys, rushing upon me, drown me with their sweetness."—*Pericles, Act 5, sc. 1.*

Just think of it ! Seventeen millions !
 Resplendent with multiplied charms,
 A host of adorable women
 Rushing right into your arms.
 Coming one after another,
 Faster than flakes of snow ;
 Myriads hurrying up to be kissed,
 And waiting for others to go.

Just think of it ! Seventeen millions !
 From every land under the skies ;
 Multitudinous types of figure and face,
 A world of wonderful eyes—
 Love's wildest visions of possible bliss
 Turned sweetly, suddenly true.
 Who wouldn't, if he could, be a Census ?
 Think ! Seventeen millions ! Who ?

But stop! These seventeen millions,
From every land under the skies,
Can't all be adorable women,
Can't all have wonderful eyes,
There are faces unpleasant to look at,
Expressions decidedly bad;
Heaps on heaps that never had beauty,
Or have lost the little they had.
There are women who scowl and who squint,
And look opposite ways at a time,
And blinking, blear-eyed monsters,
Whose kiss would be kin to a crime.
There are horrible objects with wens,
And features all twisted awry,
Termagants armed with a broomstick,
And slatterns that smack of the sty.

There are anatomical women,
With most of their bones outside,
And others, like magnified tumors,
That you couldn't embrace if you tried.
There are women with turned-up noses,
And noses bent down flat,
And features drawn, and teeth all gone,
And cheeks like a knocked-in hat.

There are women all padded and painted,
More humbug than women—I'm told—
Manufactured of cotton, and offered for sale
At current prices of gold.
There are women with hair that comes off,
And teeth which they have to put in,
Who drop slowly apart, like a bundle,
As you pull out each separate pin.

Women with brains like a baby's,
But tongue enough each for ten,
Whose trade is abusing each other,
And women who feed upon men.
Amazons, Jezebels, cannibals, hags,
Slatterns, simpletons, shrews,
Say sixteen millions of such, and about
One million a fellow might choose.

You must take them, though, just as they come,
As fast as they choose to rush in:
On the whole, 'twould seem, viewing it calmly,
As best, perhaps, not to begin.
It's a pity to give up the good ones,
But think of those others! my friend,
And as soon as you start at the head of the line,
You're in for it, down to the end.

It strikes me you'd better not do it,
In view of the risks that you run;
The feeling of constant anxiety
Would take off the edge of the fun;

In fact, the more one reflects,
 The more he's constrained to reply,
 If the question comes, "Who'd be a Census?"
 "I thank you most kindly, not I."

For myself, if they asked me the question,
 I'd answer, as echo does, who!
 And say, "By your leave, Mr. Census,
 There are seventeen millions for you;
 I wish you joy of your bargain,
 And a quiet night's rest when you've done."
 I'll be thankful *my* name isn't Census,
 And rest peacefully happy with one.

THE NEW German Empire has two noteworthy social phenomena. The peasantry, to avoid the obligatory term of service in the *landwehr*, are leaving the Baltic provinces in such numbers as to threaten their depopulation. It is not impossible that the armament system of Europe may yet be broken up by the facility of emigration to the United States. The other fact is that the sudden rise of Berlin to the rank of an imperial capital has caused an immense accession to its population, especially from the official and titled classes of the Empire. Extensive meadows in the suburbs are now covered by rude tenements patched out of furniture and rough boards. These are occupied by the lower classes, who have given place to those that are able to pay 2,000 thalers a year for a small and shabby residence. Berlin is evidently destined to become one of the great cities of the Continent, and so to realize the hopes of old Frederick William. Above all, it will give to Germany, in a measure, a national center of literary and political life—something that Germany has never yet possessed. Even in the middle ages she had no such capital. In some sense, Paris stood in much closer relation to her than did any of her own cities. Döllinger says of that period: "Paris was the mental metropolis of Western Europe." Hitherto Berlin has occupied rather a second-rate place in literary history, being noted for second-rate men. "Berlin criticism" means in Germany criticism of a slashing, superficial sort. Weimar in Goethe's time looked down upon its larger neighbor, as Boston once did and still does upon New York. Yet Lessing, Fichte, Hegel, Neander and Schleiermacher are Berlin names.

IT WOULD be a grave mistake to class the present progressive movement in Japan with the brief spirts of reform that have arisen in various Asian kingdoms within two centuries, and passed away leaving no sign. A great revolution has taken place in that country. The office whose incumbent is a demi-god in the eyes of the people, has fallen into the hands of a statesman, a young Mikado who likes work and likes improvement. He who alone has the *power* to pronounce the existing methods and institutions less than divine, has for once the *will* to do it. Such another combination of power and will, of real ability and the Mikado-ship will not occur again perhaps for millenniums. What this man does as an innovator, coming generations of Japanese conservatives will swear by. What is done for Japan must be done in this one man's life. We rejoice that one of his measures is the protection and development of native industry, and that he has an adviser so competent as E. Peshine Smith.

ENGLAND is doing a great injustice to the Irish priesthood, and undoing much of the good effects of recent 'wise legislation, by her prosecution of the Galway priests. The average Englishmen hates the priest as a foreign agent on English soil, whereas he is simply the most Irish of Irishmen when not warped into an unpatriotic position and set in opposition to his own people by some class interest or prejudice. The Galway clergy and the Galway landlords each set themselves to secure the election of a favorite candidate. The candidate of the priests was not a Catholic, nor pledged in any way to clerical objects, but he had fully accepted the principle of the Tenant Right Law, and submitted with expression of satisfaction to a penalty inflicted for a previous violation of it. The other candidate was simply the representative of hostility to that law, and was supported in that capacity by landlords of both creeds. The priests seem to have had no special or class end in view, and seem to have taken up the case from motives of purely public spirit. Their spiritual intimidation (utterly wrong as it was) seems to have taken the shape of denouncing any tenant who from cowardice or any baser motive should vote for what he at heart believed to be the wrong candi-

date, or even refrained from voting for the right one. That the landlords, however, exercised intimidation is beyond all question but the Catholic judge who sat upon the case decided that that which was utterly wrong and illegal on the part of the priests, was a prerogative of the land-owner. On his decision, which puts this distinction boldly and broadly, some score of priests are to be prosecuted by order of the Gladstone Ministry. No Irish jury will touch a hair of their heads, while Judge Keogh is the Judas Iscariot of popular hate for the time being, and not undeservedly so.

BISHOP COXE, of Western New York urges the organization of a great National Academy of Sciences, corresponding to the institutions of that name which have accomplished so much in Europe. We like the main point in his plan very well, but we at once dissent when he proposes that this Academy shall examine the graduates of our colleges and other institutions for scientific degrees and traveling scholarships. We have two objections: (1.) If our National Academy is to enjoy the learned leisure that has been so advantageous to science in Europe, they must not be expected to take out of the hand of our college faculties one of the most laborious and the most disagreeable of their tasks. (2.) Such a national examination presupposes a national system of education, which does not now exist. Two great methods of education are struggling as for life and death in this country. The old education has on its side a majority of the colleges, and, we believe, of the educated public. The new education has a majority of the uneducated on its side, and has, therefore, a strong hold on public opinion. The new Academy would at once be obliged to pronounce for one or the other system; if it tried to avoid doing so it would but have the opposition of both. Our educational ferment must work itself clear before the national ladle is dipped into it.

WE are sorry to observe that the *Spectator* of September 7th, in an article on the American Judiciary, mainly occupied with the trial of Judge Barnard and its results, remarks: "Nor were things much better in some other States. The corruption of the Pennsylvanian Bench, in particular, was notoriously as great as

that of the worst part of the New York judiciary." Now we think we shall be supported in the assertion that the great body of our judiciary will compare very favorably, not only with that of the other States of the Union, but with that in England herself, and no one member can be pointed out in any way approaching the "corruption of the worst part of the New York judiciary."

THAT the present combination at whose head Messrs. Greeley, Schurz and Trumbull stand with Hendricks and Hoffman, possesses any elements of permanence, is hard to believe. Even should it succeed in securing the presidency to its candidate, it will hardly go into the campaign of 1876 a united body. The result of present success would simply be the utter dissolution of all party lines, and their reconstruction on the simple issue of revenue tariff or protection. As to the present campaign, we do not see that protectionists need much care which is successful. Mr. Greeley has promised that no veto of his will save the existing tariff, if Congress demand its repeal. Mr. Grant, four years ago, pledged himself to veto nothing that Congress had set its heart upon, and the people evidently desired. He signed the Dawes tariff without hesitation. Except as regards the local struggle for members of Congress, *we* need hardly care, as *Protectionists*, which way the fight goes. If we do fight let it be on other issues, or else just to "keep our hand in" for the coming struggle of 1876.

NEW BOOKS.

THE GOLDEN LION OF GRANPERE; by Anthony Trollope. New York: Harper & Bros., 1872.

Mr. Trollope's last novel will disappoint his many readers and friends. He has reached so high a position as a novel-writer, that his readers on both sides of the Atlantic have a right to expect something better from him than he has given them in *The Golden Lion of Granpere*.

The scene is laid in Alsacé—so lately French territory—in the little town of Granpere, and the inn of the place gives its name to the story. The late war is vaguely and incidentally mentioned, but plays no important part in the book.

It is a simple story of the love-troubles of the heroine. George Voss, the son of the inn-keeper of Granpere, falls in love with his cousin, Marie Bolmar, who has lived at the inn with her uncle and aunt for years. Michel, the inn-

keeper, disapproves of the secrecy with which the young people have managed their love affair, and tells George that he should have been consulted and that he cannot countenance it. Both George and his father Michel, are self-willed and stubborn men, and it is decided, after quarrelling over the matter, that George shall go to Colmar, a town some twenty miles distant from Granpere, to assist a relative there, who also keeps an inn.

He leaves Granpere, having plighted his troth with Marie, and spends a year sulking at Colmar without either writing to or seeing her. Meanwhile a rival suitor appears in the person of Adrian Urmand, a prosperous young linen merchant of Basle, who presses his suit vigorously and with the approval of Michel. Poor Marie has a very unhappy time of it between the attentions of the linen merchant, which are distasteful to her, the silence and apparent indifference of her lover, George, and the importunities of her uncle Michel, to whom she is devotedly attached, and who desires to settle her in life by marrying her to Adrian. At the last, when poor Marie has reluctantly consented to accept Adrian, George appears, wins over his father, breaks the engagement with Adrian (who is, indeed, a most shamefully used lover, and who bears his woes remarkably well), and marries his cousin.

One feels all through the story that the troubles are more imaginary than real, and that they are brought about in an unnatural manner.

Mr. Trollope's Alsations make love in a thoroughly English way, and, indeed, the book is pervaded with an English atmosphere, which makes its French surroundings seem almost grotesque.

Some years ago an article was published in *Blackwood* on "American Novels and Novelists," which criticised, among others, "Queechy" by Miss Warner. The use of the abbreviation *don't* in the third person singular, was commented upon and spoken of as an Americanism.

In a number of instances in this last novel, Mr. Trollope is guilty of a like offence, and in this he is in company with many other English writers, from which we judge that this incorrect form of expression cannot be laid entirely to our account.

That this book should, on the whole, be pleasant reading, is not surprising for we can hardly imagine a story from Mr. Trollope's pen, which would not have some good points about it, and which would be entirely unworthy of his readers; but he is so much more happy among the parsons and squires of England, he understands their thoughts and their ways so much better, and he has given us so much real pleasure in his treatment of them, that we should rejoice if he confined himself, for the future, exclusively to them, and never again gave us another story like *The Golden Lion of Granpere*.

BOOKS RECEIVED.

The Rise of the Republic of the United States; by Richard Frothingham. Little, Brown & Company: Boston, 1872. Price \$3.50.

Report of the Department of Agriculture for 1871 Government Printing Office: Washington.

A Waiting Race; a novel by Edmund Yates; D. Appleton & Company. New York, 1872. Price 75 cents. For sale by Porter & Coates, Phila.

THE
PENN MONTHLY.

NOVEMBER, 1872.

INDEPENDENCE HALL.

IT has been well said of individuals, that there exists no stronger incentive to merit than the recollection of a long line of distinguished ancestry, revived, it may be, by a gallery of family portraits, or the preservation of family relics. The Chinese are believed always to devote a room to the perpetuation of all kinds of ancestral associations, while the English, thanks to their feudal system, still consolidate and transmit their family mementos and heir looms.

There always have been those who scoff at that species of pride derived from fair lineage; but such raillery, in the main, is but an effort to decry a too conscious deficiency, or used as a cloak to "ape humility"—a cloak that no more conceals the true sentiments than did the assumption of his rags by the great cynic, whose real pride was plainly seen to peep through the very rents in his garments. As with individual families, so it is with nations.

We shall be told that the "genius of our institutions" is averse to fostering the former; but surely no such objection can be raised against the latter. The most austere *Hoi-polloi-ist* will concede that the greater the pride in the past history of our country, the surer the guarantee of patriotism in the future. To this end no means more effective can be devised than the establishment of a permanent *National Museum*. Such a practical mode of object instruction will continue to teach to all coming

generations of Americans the lesson learned in 1776, and about to be rehearsed in 1876—that in national unity lies our strength, of which State pride and local impulses are legitimate constituent elements. There can be no segregation into a civic of that which essentially forms a federal bond—the community of the past.

Assuredly, that past should not be permitted to bury its dead, or only be revived by spasmodic celebrations of anniversaries of one hundred years. Let it rather be made an ever-present reality by the closest personal and historical associations. Let it be an ever-living witness, in whose voice the accents of departed patriotism may continue to utter, "*Dulce et decorum est pro patria mori.*"

The man that is not moved by what he reads,
That takes not fire at their heroic deeds—
Unworthy of the blessings of the free—
Is base in kind and born a slave to be.

Unquestionably, the greatest national memorial in the history of the United States is Independence Hall—the birth-chamber of the Republic. Let us briefly glance at the events of the nativity.

Delegates from each colony—appointed, in some cases, by the existing legislative bodies, in others by committees of safety—had first met together in Carpenter's Hall for a defined purpose—to devise measures for uniform action in approaching their recognized sovereign by petition, and in order to obtain redress of grievances. Failing in these efforts, they returned to Philadelphia in the spring of 1775, with the anticipation of a prolonged session, when the hall used by "the representatives of the freemen of the Province of Pennsylvania" (hence the "State House") was assigned to them for their sittings. Thus it was that in that very hall, in June, 1775, on motion of Thomas Johnson, of Maryland, George Washington was unanimously elected commander-in-chief of the armies raised and to be raised for the defense of America.

But above all, it was here that, on the 7th of June, 1776, John Hancock occupying the President's chair, the memorable act was initiated that sanctifies the whole building. We see Richard Henry Lee, of Virginia, rise in his place. He holds in his hand instructions from the convention assembled at Williamsburg, which had been brought to him but a few days before by Thomas Nelson, himself then present as a member. Mr. Lee reads a resolution, still extant, in his own hand-writing:

Resolved ~~That~~ ~~that~~ these United Colonies are, and of
 right ought to be, free and independent States, that
 they are absolved from all allegiance to the British
 Crown, and that all political connection between them
 and the State of Great Britain is, and ought to be,
 totally dissolved.

* * * * *
 FAC SIMILE OF THE ORIGINAL RESOLUTION AS OFFERED BY MR. RICHARD HENRY LEE.
 * * * * *

Around that room are sitting men who for weeks and months have been toiling to bring their countrymen up to this point. John Adams, Samuel Adams, Elbridge Gerry, Bartlett, Chase, McKean and Whipple and Wythe, and Hewes, who was bearing the whole weight of his colony—most probably a full representation of those in favor of the resolution; while Dickinson, too, was there, the conscientious man and pure patriot, who, like his colleagues, Robert Morris, Wilson, Willing and Humphreys, restrained by their instructions, also believed that the adoption of the resolution at that time would produce divided action, and were hence opposed to it. A meagre house induces a postponement until the next day, and after a reference to the committee of the whole, the 1st of July is fixed as the day for further consideration, but "least any time should be lost in case the Congress agree to this resolution," a committee is appointed to prepare a declaration in consonance therewith. It is not the place here to enter into a detailed review of the occurrences of this period—the full history of which has been promised, and shall, in due time, appear. Suffice it for our present purposes to recall the fact, that on the 1st of July, Benj. Harrison, the chairman, reported Mr. Lee's resolution, and had, then and there, referred to his committee, that declaration which Jefferson, Adams, Franklin, Sherman and R. R. Livingston, had unanimously agreed upon. On the 2d day of July the resolution adopted, the United States became a nation. Its sponsors were not yet quite satisfied with the baptismal address, which was to announce the event to the world, but finally, on the 4th of July, after anxious debate thereon, paragraph by paragraph, that, too, received the approval of all present, and was ordered to be engrossed—though the latter was not accomplished until some weeks afterward. Thus two distinct groups of eminent men have associated their names indelibly with the Declaration of Independence—first the "Actors," and, secondly, the "Signers."

The councils of Philadelphia honored themselves in April last, by passing an ordinance for the restoration of the building where these events occurred, and for setting it apart forever in commemoration of Independence.

Prompted by the right spirit, the City Fathers had already sought, in 1854, to purchase the whole of the Peale collection of

paintings, then offered at public auction. Failing in this, they bought a great number of the historical portraits, (among which there were a dozen of the signers,) and from time to time have continued to add to the collection.

Occasionally a public spirited citizen would present to the city a portrait, a bible, a casting, or a relic—real or imaginary—and it was at once stored in this room. The latter became a general receptacle for framed resolutions of councils, the abortive contribution to the Washington monument—in fact, it served as a living, ever-ready response to the often embarrassing question in councils—"what *shall* we do with it?"* It was feared by some that the vehicle, yclept Washington's coach, might even find its way into this chamber, for here already his *horse* had been placed, prancing over the door, in such form and manner as might have justified the interference of the Society for the prevention of cruelty to animals, whose agent—had he ever seen it—not recognizing the rider, would have unquestionably exclaimed, as is his wont, "come down my gay Peruvian, come down."

Here, also, we had Brandt, the savage above all others, literally damned to eternal—infamy; Red Jacket, too, forsooth—a lot of men of whom the catalogue could say, "of liberal education and excellent moral character;" the vilest daub and caricature of General Jackson (which, by-the-bye, cannot, under the ordinance, be removed); the likeness of an obscure political agitator doing duty for Charles Lee, of Revolutionary notoriety; lithographs of volunteer refreshment saloons, etc., etc.

The first point to be attained was the removal of all portraits, relics, and other deposits not associated with the historical memories of the Hall. These, in many instances, absolutely defaced the walls, and in many others destroyed the architectural beauties of the chamber.

The janitor having carefully stowed away all the relics and a great deal of trash, the portraits, not required for illustration and adornment, were removed to the Fidelity Safe Deposit

The very cellar was not long since used for impounding and slaughtering vagrant dogs captured in the summer season. Hon. Wm. M. Meredith ever facile to turn to account what to others would be an interruption, had his voice drowned, on one occasion, in the midst of a ceremonial reception, by these yelping, whereupon he declared the Hall haunted by the spirits of 1776, and identified the voices of Jefferson, Lee, Hancock, etc.

and Trust Company, whose president had cordially offered to take charge of them. They have been admirably displayed for public inspection on the walls of the directors' room. Great credit is due to Mr. Campbell, of Hall & Garrison, for the taste shown in their arrangement, as well as for the care taken in their transfer from the Hall.

The room with its antique wainscotting, pillars, cornices, etc., presents to-day the same general appearance as it did during those times that did indeed try mens' souls. The original chandelier still hangs there; the chair which was occupied by the President is restored to its place on the dais; in front stands the table at which Hancock wrote, and on which the Declaration itself reposed after it was engrossed, and where one after another of the members of Congress came forward and appended his signature. Near by is a chair with its original covering, well worn in the use of an individual member of the Congress. Two more of these chairs, though unfortunately newly covered for the convenience of the sergeants-at-arms of the State Senate, have been rescued and placed on the floor. On either side of the dais are ranged portraits of the following, or spaces therefor—(an asterisk denoting in each case the latter). :

John Hancock—The President.

Richard Henry Lee—The mover of the resolution for Independence.

*Benjamin Harrison—The Chairman of the Committee of the Whole who reported the same.

Thos. Jefferson—The author of the Declaration.

John Adams—The seconder of the resolution, and the "Colossus of the Debate."

*Sam'l Adams—The "Palinurus of the Republic."

*Rob. R. Livingston } Of the Committee to draft the Declaration.
*Roger Sherman }

Benjamin Franklin, Robert Morris, Bishop White, the Chaplain; Chas. Thomson, the Secretary; John Dickinson, Thos. Heyward, Sam'l Chase, Elbridge Gerry, *George Wythe, *Edward Rutledge, Thos. McKean, George Read.

On the opposite panels are John Witherspoon, Charles Carroll, Francis Hopkinson, Samuel Huntington, Philip Livingston, Benjamin Rush, Arthur Middleton, George Clymer; with spaces for Robert T. Paine, John Penn, George Ross,

James Smith, Richard Stockton, Thomas Stone, George Taylor, Matthew Thornton, George Walton, William Whipple, William Williams, Oliver Wolcott, Abraham Clark, William Ellery, William Floyd, Joseph Hewes, William Hooper, Stephen Hopkins, F. L. Lee, Fran's Lewis, Thomas Lynch, Lewis Morris, Thomas Nelson, William Paca, James Wilson.

There will also be spaces for John Rogers, Thomas Johnson, John Jay, Henry Wisner, Geo. Clinton, Thos. Willing, Charles Humphreys, and a few others.—“Actors.”

The names of John Morton, Cæsar Rodney, Carter Braxton, John Hart, and such others of the above whose portraits were never taken, will be appropriately presented in some permanent shape.

Over the very doorway through which Washington passed when he left Congress to assume those duties which earned for him his enduring title of “First in War, First in Peace, and First in the hearts of his Countrymen,” has been hung an original portrait of the *Pater Patriæ*.*

Along the surbase on each side of the President's chair, subordinated to the general design, are the Presidents of Congress from 1774, not included in the above category, and in similar positions on the sides, portraits of the Revolutionary officers.†

The draft of the declaration in Jefferson's handwriting is in this city, in the possession of the Philosophical Society, most admirably framed and adapted for exhibition. It is hoped the society will be induced to deposit this valuable relic upon the table in the Hall, and, also, a chair which they own, which was used by the “Delegates,” and which like the one deposited by the writer in the Hall, contains the original covering. Two more of these chairs are known of, and these will, it is believed, be also ultimately restored. There will be placed in the vestibule upon its original

* The noble idea, so nobly carried out, the preservation intact of Washington's Home on the Potomac is due to the women of America under the auspices of Miss Ann P. Cunningham of South Carolina as Regent assisted by a Vice Regent in each State—in Pennsylvania by (the then) Miss Lily Macalister.

† The worthy and courteous janitor, Mr. Edwards, has become a “walking catalogue” to the treasures of the Hall, and takes especial delight in welcoming all real pilgrims to its precincts.

frame-works, the celebrated bell, which on the 8th of July, 1776, fulfilled the injunction prophetically inscribed thereon a quarter of a century before :

“PROCLAIM LIBERTY THROUGHOUT ALL THE LAND UNTO ALL THE INHABITANTS THEREOF.”

It seemed that no opportunity could be more favorable toward perfecting this great memorial of the men and times of 1776, than the approach of the centennial anniversary—no worthier coadjutor than John L. Shoemaker. True to the public spirited instinct of his namesake, who in 1765 affixed his signature to what we Philadelphians are fond of calling the “first Declaration of Independence,” Mr. Sheomaker was sedulously laboring for the success of the centennial celebration ; recognizing at once the propriety of the suggestion, he grasped the scheme, and has been unremitting in sustaining every effort to its accomplishment.

His Honor, Mayor Stokley, as well as Mr. J. H. Pugh, the efficient popular commissioner of city property, have cordially co-operated ; while the presiding officers of both branches of councils, the ex-Mayor, Mr. King, and other members of the committee of select council, as well as Mr. Haines, have evinced much interest in the work, and thus contributed essentially toward its success. Several noble-hearted citizens have already contributed valuable portraits, or promised so to do—Philip F. Wharton ; Medical Director, George Clymer, U. S. Navy ; J. Francis Fisher, Edward L. Henry. The list is daily growing as the object is being understood. Philadelphia’s contribution to the Washington monument will be forwarded to its destination, or be otherwise appropriately disposed of. Every means will be used to make the very atmosphere of this chamber breathe forth the command so appropriately applied by a distinguished physician of Philadelphia, on there greeting his professional friends : “Put off thy shoes from off thy feet ; for the place whereon thou standest is holy ground.”

As soon as the Court of Common Pleas can be appropriately accommodated, its present chamber should be fitted up as an auxiliary to the Hall of Independence. In itself it is an historical room, used as the colonial executive department for nearly half a century before Pennsylvania became a State. The second story of this building contained the public banqueting hall of former

days; and in one of the rooms met the Convention of 1787 to frame the present Constitution of the United States. Subsequently Peale's Museum occupied this floor.* The whole building would form an admirable receptacle for the *National Museum*. Here the different epochs of our national history can be appropriately illustrated by portraits and relics.† A plan for this purpose might easily be matured and accomplished; and the centennial anniversary might then indeed behold the actual realization of the picture so gloriously and prophetically foreshadowed by the Founders of the Republic themselves, in their address to the Irish, in 1775 :

"The golden period, when liberty, with all the gentle arts of peace and humanity, shall establish her mild dominion in this western world, and erect eternal monuments to the memory of those virtuous patriots and martyrs who shall have fought and bled and suffered in her cause."

Fellow-citizens of the United States, let us make the one hundredth birth-day of the nation its *Golden Anniversary!*

FRANK M. ETTING.

*The following letter contains valuable information in connection with the foregoing :

211 PRICE STREET, GERMANTOWN, }
PHILADELPHIA, October 12th, 1872. }

My Dear Sir: I very cheerfully comply with your request, and send you a sketch of the division of the rooms in the State House occupied by Peale's Museum, before its removal to the Arcade, in Chestnut street. The collection occupied all of the second story. The long gallery extended the whole length of Chestnut street front, and contained beside the large collection of birds and natural and artificial curiosities, the collection of portraits of Revolutionary heroes, signers of the Declaration of Independence, and others distinguished in Revolutionary history; all of which were painted by Charles Wilson Peale. They were arranged in a double row as a frieze above the show cases. The southern half of the building was divided into an ante-room, of the width of the vestibule below, used for the popular lectures given to visitors in the evening, and to a room on the right, called the south-east room, and to one of similar size on the west side, containing the preserved animals, with a frieze of portraits of the heroes of the war of 1812-15. The south-east room contained the skeleton of the "Mammoth," the great attraction of the institution, preserved animals in cases, and the collection of portraits of distinguished

†Mr. Joseph Leeds, of this city, submitted to Councils, in June, 1871, a scheme for the improvement and dedication of the entire square, which contains many valuable suggestions.

French savans, painted by Rembrandt Peale, during a residence of many years in Paris, in the days of the First Empire. In this room, in the vestibule, and in other parts of the building, were hung pictures by the elder Peale, representing scenes of Revolutionary history, together with some copies of scriptural subjects, from other painters, and a few portraits of people only remarkable for their deviation from ordinary humanity: such as the horned man, spotted negro, etc.

Being a very constant visitor for many years, the situation of everything contained in the collection is so impressed on my memory that I think I could replace them in almost the exact position occupied by them forty years ago

Wishing you the greatest success in your most laudable and patriotic efforts,

I remain, very truly yours,

J. R. LAMBDIN.

COL. F. M. ETTING.

SOME GERMAN CRITICS OF ADAM SMITH.

THE *Inquiry into the Nature and Causes of the Wealth of Nations* was published in 1776, at a time when German literature was beginning the grand stadium of life which closed with the deaths of Goethe and of Hegel in 1832. Lessing was delving into the treasures of the Wolfenbützel library, and striking merciless blows at the priggishness of the Gallomansics; Goethe and Humboldt, Schiller and Richter were in training for their great future, or had already given evidence of their titanic strength. The orthodox theology, roused from its sleepy stage of "rational belief," was beginning the new life of controversy and discussion, which was to culminate in Schleiermacher and De Wette, Daub and Neander. The chief spring of the new intellectual movement had already begun to pour its cold crystal waters into the stagnant pool of German thought, and cleanse it to its depths that it might again reflect the march of the stars in their courses. Kant's critical philosophy was coming forward, book by book (the great "Critique" itself in 1781), recalling men from their shallow self-conceit, their empty illuminism, and their glorified "common sense," to thought upon the deeper questions of the universe—man, knowledge, duty, and God. Kant was the father of strange children, the sight of whom would have filled his half-Scotch soul with

dismay.* Fichte's idealism, Schelling's philosophy of nature, Hegel's new dialectic were all born of his criticism, but the old transcendentalist would have repudiated the relationship. Perhaps he would have likened himself to a motherly hen, that has hatched a brood of ducks, and stands clucking in terror on the solid earth while they spread themselves over the treacherous waters of the pool. He thought that his chief work had been to fix the limits and bounds of speculation, but these irreverent children recognized no bounds, and treated him as a purely negative laborer, who cleared away the rubbish of the past to leave room for their elegant and airy castles.

The new German philosophers flung themselves into all noble fields of thought and discussion—law, politics, theology, æsthetics, history, poetry, belles lettres, etc. They revived the mediæval conception of philosophy, as designed to bring the *omne scibile* into the compass of a single system, and account for the whole universe. All the wealth of the past was ransacked, and the obscure names of great thinkers brought to light. All the labors of foreign scholars were utilized, and surpassed; Spain was taught the worth of her Calderon and her Cervantes; England to read her Shakespeare. Adam Smith's book, of course, did not escape study, while all the rest of the world were busied with its specious pleas against international restrictions.†

Among the first who devoted their attention to him was Franz Baader, whose unpublished *Note Books* of the year 1790 are full

* Kant was descended from a member of the well-known Scotch family of Cant, who settled at Königsberg in the seventeenth century. Fichte was the descendant of a Swedish soldier, who remained behind in Germany, after the Swedish troops, employed in the Thirty Years' war, went home. The Norse fire, as of a metaphysical Viking, blazes out of the man continually. Herbart was of English descent, we believe, and the practical English intellect is his characteristic. His dislike of search after first principles, his mechanical theory of the universe in prose opposition to the poetry of all dynamical theories, his strength in discussing specific points of ethics, and his weakness in regard to their general idea, and above all his readiness to acquiesce in a confessed difficulty as heartily as in an ascertained truth, are all eminently English. It is strange that his philosophy has excited so little attention in England and America. Schelling, Hegel, Wagner and Baader were pure Germans.

†German translations appeared in 1776—91 and in 1801, besides a republication of the original at Basel.

of brief studies of the subject ; but he did not pronounce any public opinion till later. In 1801 appeared J. G. Fichte's *Der Geschlossene Handelsstaat* ("The State closed to Foreign Commerce"), in which the very boldest ground was taken against the Free Trade system. He was the Cephass of metaphysic, the man who delighted in high-handed vigor. His very ethics were imperious and tyrannical. Only in the atmosphere bred in Europe by the French Revolution, could the man have breathed freely, and he was no whit behind the Jacobins in his boldness and his faith in bold measures, although in morality he stood as far apart from them as pole from pole. He could enter into all the enthusiasm of the revolutionists, and even surpass them, but he was not of them. Menzel says: "He hankered after the dictatorship and the terrorism of virtue."

His book was just such as might be expected from the man. He rushed to the other extreme from the *Laissez faire* philosophy. In his view it was the duty of government not to restrict and regulate foreign commerce, but to exclude and prohibit it, a very few exotic articles—such as wine in northern countries—excepted. He was ready enough to talk of a world's union of nations, but let us have the nations first if you please ; let us develop their distinctive national life to its highest point of completeness, for only thus can those larger aims of the future be realized. He pointed out the fact that certain parts of the earth's surface were manifestly designed by nature to form with their inhabitants political wholes, a hint that has borne rich fruit in the scientific study of geography (*Erdkunde*) by Ritter and other Germans, who have solved Fichte's problem: Into how many such territories is the earth naturally divided, and to what number might the existing States be reduced, if we are to secure a division of the race suited to its relations to nature? As against the blending of existing nations into one whole, Fichte tersely says, that we have as yet no nations in the true sense, and nowhere a firm national culture is to be found, to serve as the transition to a universal and purely human culture, to be produced by the intercourse of nations with each other. For in our efforts to become everything, and to be familiar with everything, we have in truth, and most thoroughly, become nothing, and are at home in nothing. A vigorous national culture was what he expected from his *State* [when] *closed to*

commerce, and supposed that science (in the German sense), would become the sole and effectual bond of humanity, when all the rest had been done away with. In later life he grasped vigorously the idea of a world's union of nations (*welt-staaten-bund*), but rejected as impossible and utterly undesirable that of a world-nation (*welt-staat*).

Of course he was severely criticized for his boldness. Hestermann replied in *Der Offene Handelstaat* (The State Opened to Commerce) in defense of Adam Smith's position, as did Lüder, Köppen, Weitzel, Raumer, Lotz, etc., etc. The shallow old rationalist Fr. Nicolai reviewed Fichte in his *Universal German Library*, giving a fair specimen of what the Germans mean by "Berlin criticism." *Apropos* of Fichte's proposed admission of wine, Nicolai exclaimed: "He must surely be fond of wine!" Rehberg, in the Gottingen *Gelehrtes Anzeigen*, reviewed Fichte with a great show of impartiality, but in reality in support of Adam Smith. On the other hand the reviewer in the Erlangen *Literary Gazette* was completely carried away with Fichte's book. He gave large and carefully chosen extracts from it, and called public attention to its scientific importance, its precise, sharp, clear presentation of Fichte's principles of natural law, and declared that any one who would take the trouble to put himself in Fichte's point of view, and read the book without prejudice, would be fully convinced of its correctness of principle.

From these indiscriminating advocates and opponents of Fichte's extreme views, we turn to two more judicious critics. The first is J. J. Wagner, a follower of Schelling up to 1804, and afterward an independent philosopher of the same type of thought, but with more affinity for the pure mathematics. In his review of Hestermann's *The State Open to Commerce*, he says: "We have already called attention to the fact that Fichte's theory rests first of all upon his definition of *property*, but also upon the principle that there could exist a legal constitution which should accomplish all the aims involved in the idea of the State purely by constraint. This view embodies Fichte's entire view of law, and whoever would annihilate his book, must set himself to overthrow this. Hestermann has not gone back so far to first principles, but finds the foundation of Fichte's paradox in the definition of property that we have referred to, that it is the right to a definite activity.

The definition is certainly too broad, for the right of property does not expend itself in a definite activity in general, but upon an activity defined by its object. But Fichte never went so far with his definition as to demand the governmental distribution of industry as well as of ground and soil. Furthermore he showed with great ability that the natural life-occupancy possessed a legal validity, through the union of men in nations, while in these unions individuals entered into a relation to an organization, according to which they were regarded as living only through the whole and by the whole, just as the parts of an organic body exist only through the whole. As soon as the national society is set up, the life of the individual is furnished with a legal basis."

Wagner also says: "Hestermann supposes an equality in the distribution of property as a universal, world-wide, legal condition of things, and derives this from the particular legal constitution of the several nations, while other authors begin with the establishment of a single nation, and pass from this to the world-nation as an ideal state of things. This is not without its influence upon his other views, especially his attempts to fix the relations which nations sustain to each other. For where other authors begin from the point of the complete organization of the single nation, and so pass easily to the position of exclusiveness and isolation, our author beginning from the idea of the universal nation (which, however, has no existence), naturally thinks of his nation as part of a whole (which, however, certainly does not exist), and puts it into a relation of mutual reaction (of which relation the other related parts are wanting), and, therefore, leaves it open on all sides. We are curious to see how he will reconcile [in his forthcoming book] the necessary selfishness of the nation with the demand that it shall regard itself as a member of a universal organization of nations, and so avoid employing the measures of constraint which he opposes. The world-nation, however, takes shape first of all through the rise and succession of the single nations, and these are properly the production of nature and not of freedom. The problem of the highest internal organization of the single States must, therefore, be completely solved first, ere they can approximate to a world-state." So far Wagner's review of Hestermann's plea for the Free Trade doctrines of Adam Smith and his school.

Franz Baader, our second critic of Adam Smith, we have already named. He is often classed as a follower of Schelling, but with great injustice. If either of them learnt from the other, it was Schelling from Baader, whose true masters were Eckhart and Tauler, Böhme and Saint Martin. In the first two years of the present century, when Baader was actively employed as an inspector of glass works by the Bavarian government, he contributed to local journals some half dozen noteworthy essays, which his disciple, biographer and editor, Prof. Franz Hoffmann, has collected in his edition of Baader's *Minor Writings* (*Kleine Schriften*, Würzburg, 1847; 2d Ed. Leipzig, 1850).

The second of these papers is "on the So-called Freedom or Passive System of National Economy," and was published in a Bavarian newspaper of 1802. He writes:

Of the three chief classes or branches of industry, which we may call the practical classes of every nation (all others sustaining a ministerial relation to these), viz.: The farmers, the manufacturing class, and the commercial class, each has its own peculiar interests, which are often in actual antagonism to those of the rest. This antagonism must be regarded as opposed to the interests of the State itself, since the object of the latter is not to secure the largest possible well-being of any one of these classes at the expense of another, and since its own power outwardly consists, not in the well-being of individuals, nor in the wealth of a few persons, but in the well being of the largest possible number of its citizens.

Let us consider an example of this antagonism in the case of the farming class. The procuring and maintaining plenty, *i. e.*, abundance and excellence of the means of subsistence for man and beast, and in general of the raw materials that supply the manufacturing classes—and here the miner is to be classed with the farmer—is certainly, among all the affairs, objects and duties of a well-ordered nation, one of the first and weightiest. But grain-tillage, cattle-raising, etc., are a branch of industry, and, indeed, as it will be held, of free industry. To promote it as such, there is no other means than to make it profitable to those who live by it. But no one will deny that it will be profitable in proportion as the farmer can get more for his wares. The fewer of these come to market, and the more buyers present themselves, of course so much the better for the farmer, and this is so much the more likely to be the state of things, in proportion as the farmer refrains from making outlay of capital on improvements, unless the nation can in some way give him some assurance that he will not be impoverished in case of abundant harvests, which are especi-

ally to the advantage of the other classes, or, at least, are quite adapted to their present interests.

A similar antagonism of private interest to the public can easily be pointed out in the case of the other two (manufacturing and commercial) classes, and several authors—Adam Smith especially—have so clearly exhibited the natural tendency of the interest of the commercial class as against those of the other two, that it is in every way notable example of their lack of logical sequence, when they, after circumstantially describing to us how the natural and otherwise unblamable selfishness of this class, left to unhindered freedom, operates to the subversion of those interests, and how it would be easy for this class, above all others, to unite with their own aggrandizement the impoverishing one or both the other classes,—when I say, these very writers in spite of this, will not hear of the government either guiding or restraining this selfish energy, which is, however, the only remedy for the evil, but from which they, with all earnestness, would dissuade the nation, as an entirely superfluous piece of interference. Since, then, these three principal classes of every nation are, or appear to be *each against all, and all against each*, the question arises, whether this antagonism, this irreconcilability of their interests is really unavoidable or not. If the former be the case, then there is no such thing as a national economic policy, inasmuch as this, according to the usual conceptions of it, has for its end the closest possible union of the welfare of all classes of society, and such an economy is merely an imaginary pretense to being an art. Instead of it, there is then, at most, only the preposterous “art of finance” so-called, which is properly a kind of financial scheming, which teaches to get money wherever and however it can be got. The ruler in this case must make himself a party to the cause of fortunate classes and individuals, against others whose poverty and misery were the source of the wealth of those others, and out of this state these must, therefore, never be permitted to emerge. Were the interests of those classes that alone contributed to the national revenue to cease to coincide, as could not fail in this state of things to be the case—were some of them to be found carrying on a commerce with the classes of other nations which benefited themselves but injured the other favored classes at home, then again the ruler must, in this case, also take sides for the one of the classes of citizens that relied on him, against the rest. In this last view the “mercantile system” (so-called) would also in reality be the only politics, and all-wise political economy would begin, not from the view that each nation should honorably cherish and sustain itself at home, but that it should trick other nations out of their money and welfare, get ahead of them in purse, etc.

But it is not the case that this antagonism is unavoidable and

incapable of reconciliation. The interests and the welfare of all individual industries and classes are in every way reconcilable, and in fact it is only through this reconciliation that the welfare of all is capable of a greatness and an increase that none of them could attain to in any other way. And to abandon this work of the reconciliation of interests in any nation, and to rest the well-being of a whole nation exclusively upon the well-being of one class or another, or to seek this means of promoting the national welfare, is just about as wise a proceeding as if one were to curtail a body of its essential members or organs, or even of one of them, in the hope that the body would thrive in spite of the mutilation, and that the vital fluid would pervade the other members in so much the greater richness.

Let us see, now, whether this needful reconciliation of the clashing interests of these three classes can be established, and a true and solid national wealth secured, while the government sustains a merely passive relation to them. Or whether rather each single political body does not reach and hold its true place in the same way that the several natural bodies do—"as nature forcibly binds in one antagonistic forces, and by their strife gives shape and form to the bodies of her sphere."

How a harmony of interests is possible in a general way in the case of buyer and seller, we can in so far see in comparing with another of the same sort any manufactory upon which there has been a considerable outlay of capital and skill, and which, therefore, sells better, cheaper, and perhaps more wares, and therefore brings in much larger returns than the other. But what is here said of the manufacturer's branch of industry, is equally true of the other two branches, and every one will at once admit that the simple increase in the mass of what is sold, and the more rapid circulation of capital gives increased profit on the whole, even when there is a loss in single points. It appears equally clear that the possibility of selling cheaper, (*i. e.* without preventing an increase in the seller's prosperity,) amounts to a necessity to sell cheaper.

The first step to all these results, and their *sine quâ non*, so far as the government is concerned, is in securing that the consumption, which forms the only bond of the three classes, shall within each single country be so controlled as to be a mutual interchange of commodities, and the three classes be held in such an attitude and relation to each other, that neither class shall be able to increase its consumption without thereby contributing to the strength of the others. This, it is admitted, can only be effected by restraining with the most careful attention, and by prohibitions and seizures, any partial and one-sided intercourse of any of the classes with a foreign class, which might weaken or hinder the internal intercourse that the government especially aims at

promoting. So long as this is neglected, so long will the government, by its help and protection, fail to establish the home circulation (commerce) in such a position of safety and freedom, as would enable it not merely to endure the destructive and alien influence of such foreign commerce, but even, as it were, with still stronger organic force, subordinate that commerce to itself, or assimilate it. So long as the government believes that its attitude must be one of indifference as to whether any class turns its industry and commerce to the service of any other class, at home or abroad, and will permit it with perfect freedom to follow its private preferences,—so long has the nation in which this is going on never taken the first step forward to independence, and will surely see itself brought ever farther backward by all the nations with which it keeps up commerce after this fashion. Such a nation, as yet, forms, properly speaking, no separate and single State, since the various chief members of the community find themselves not yet in organic union with each other, but still scattered and outwardly entangled. It forms rather the colony or province of one or more nations, toward which it need not, must not, ought not to sustain any such relation, according to its own idea. But as the actual liberation and delivery of any single nation from others is not to be expected while its government holds the passive attitude we have mentioned, even so these several classes, on their part again, can only attain through the positive interference of the government (its direction and arrangement of their intercourse, and its calculation and equalization of their powers) to the greatest possible degree of prosperity, and only thus can their mutual commerce or industry be made and kept truly free. That belauded passivity of the government is good for as little here as there; in general, it is good for nothing.

To perceive this more clearly, let us consider the fact that the true freedom of trade (of commerce) between those three classes consists of nothing else than in their being equally dependent upon each other,—in their necessity for each other as regards consumption. Only through their standing in equal need of each other, so that no one class has the exclusive prerogative of fixing prices and consequently of monopolizing the profits that should minister to the growing prosperity of all three, and only through the returns for industry being in general equalized, and the free distribution of capital and skill being kept uniform,—only in this way, I say, will that *freedom* and *equality* (of capacity to gain) be guaranteed to each of the three classes, and only in this way will we keep in mind the sense and significance of those two words, that actually seem to be forgotten before they are understood. But only the nation through its government can *confer* this freedom, and it can only do it by first of all *taking away* from each single

class the power to injure the rest. For this it is that removes those obstacles that stand in the way of a reconciliation of the interests of these three classes, and the preservation of their balance of force, between the various classes—measures that demand of the government the most strenuous activity both in tracing out these obstacles, and in proclaiming the severest measures against them.

When it is brought to the light we finally perceive that the same obscure and imperfect conceptions of *natural right, property, nation, etc.*, underlie this system of pseudo-freedom in national economy, as in general served for the foundation of that political system of pseudo-freedom, which, we may hope, is fully exploded. When, that is, the nation protects each class and citizen in regard to property only so far as to secure to him what he has already acquired against all attacks from without or at home, but, on the other hand, leaves him completely bird-free against all other men in what touches him just as closely, the acquisition of property, then the nation has done only half its work, and its subjects are living one half in the savage "state of nature" (*hors de la Loix*). Furthermore, the several classes and citizens have a right, also, to their just share of the largest possible prosperity. This prosperity, however, they can only obtain when the powers of all co-operate to produce it. To unite these powers is, therefore, a problem, on whose solution the government must labor unceasingly. But it can never be accomplished by a bare negative attention to each others' interests, so as to avoid detracting from their prosperity; it pre-supposes a natural, positive help to prosperity. Since, then, this cannot and must not be left to the caprice and the freedom of the several classes and persons, and the active constraint of the government must be brought to bear, how can men get it into their heads that such an interference to accomplish the second condition of this union of powers is dispensable and unnecessary, and in the last resort hurtful? Be it so, that thus far the grossest possible mistakes have been made, and the greatest blunders perpetrated by individual governments, and that this constraint has often been exercised to no good end, and by no wise means, as well as with no profitable results, it does not follow that it is dispensable and needless. This constraint, this oversight, this interference of the government with the industry of its subjects, is involved in the very conception of its right to protect and to assist them; a right among the first and most inalienable that belong to sovereignty, and one that should never lie dormant nor be given up.

So far Bader. Some of his expressions, as might be expected from the employé of a paternal government writing in the age of the continental reaction against Jacobinism, sound ungracious to

our democratic ears. To borrow the language of metaphysics, he sets people and government over against each other, in a stiff Cartesian dualism. He looks on them as led by divergent maxims and capable of antagonistic interests. He speaks as if the government were to do the thinking and deciding for the people. We of Greater Britain, and of Great Britain, have devised by various practical methods and experiments an *identitäts-philosophie* of the two spheres. The economic limitations needful for the full and vigorous development of the national life, we ennoble by making them self-imposed limitations, not such as an alien and wiser power has devised for us.

Baader, however, was no *servilist*, as he used to nickname the anti-liberals. He was equally hostile to the party of the Revolution, and to the opponents of the Revolution; to both he opposed the Evolution as the true line of political movement, defining it in a paper "on the positive and negative evolution of social life" (1834). He held that any social movement that was one-sided, simply necessitated, sooner or later, a transition to its opposite. The princes that checked and hampered the *evolution* of the life of the European nations, were responsible for the *Revolution*; the demagogues of the Revolution brought back the despots:

He that roars for liberty
Faster binds a tyrant's power;
And the tyrant's cruel glee
Forces on the freer hour (Tennyson.

What we have quoted is illustrative of the whole man and his mental force. His writings are full of deep glimpses into truth, seeds cast out to fertilize in other minds. He always lacks completeness of presentation. Here he obscurely anticipates the very latest views of the harmony of interest of the various classes of society, while he stands with Fichte on the ground occupied at a later period by List—the national life is the first and chief factor in all problems of Political Economy. Its true name as a science is *national economy*; its chief end is not "the maximum of production," but *the maximum of national life*, for each nation, and for all nations. It rejects the industrial imperialism of the English school, and accepts the providential boundaries of the nations and their national and separate unity as a part of the Divine order. Fichte's bold paradox was but the exaggeration of a great principle, while Baader stands on the true and just ground of national policy.

A FRENCHMAN SEES M. BENAZET.*

MY DEAR COUSIN MADELEINE :

I READ the newspapers with the most profound respect and every printed word is to me as the word of the Evangelists. Have we not all long known that the editors would rather cut off their right hands than deceive the public? And besides, I have heard it said in several *cafes* that journalism is of a sacred character, and that journalists form a kind of priesthood. Now, about three months ago all the journals of Paris sounded, in unison, the praises of a little German town named Baden. Some admired the wild beauty of its *environs*, the solitude of its forests, the majesty of the ancient ruins which surrounded it, the salubrity of its waters, the mildness of its climate, the silence, the peacefulness and the holy meditation which one can enjoy there. Others, with a flourish of trumpets, loudly sounded praises in honor of the balls, the theatrical performances, the symphony concerts, the hunting, the races, the fire-works and the charming hubbub which fills this adorable *inferno*. Perhaps a skeptic would have been alarmed at these contradictory descriptions, but for my part, having a trusting heart and a confiding spirit, I understood that each one, according to his tastes, found Baden silent or noisy, crowded or a solitude, and that all the world was happy and contented there. When I heard people praising the simple manners, the hospitality, and the disinterestedness of the inhabitants, it recalled to me the ballads of the middle ages and the tales of the good Canon Schmidt ; I was delighted to learn that nothing had changed, and that one found still, beyond the Rhine the Germany with the golden heart and the blue eyes. When I read in the correspondence from Baden—"The town is full of Dukes, Grand-Dukes, and Arch-Dukes—we count them now only by dozens ; they fill every hotel ; one meets them in the Conversation room in companies of seven or eight ; one may touch them with one's hand and even tap them respectfully on their stomachs"—I said to myself with democratic pride : "What does this prove but that the age has advanced and that excellent Germany is at the head of this progress." When I learnt that a poor Italian ar-

*[The above article has been translated from "Lettres d'un bon jeune homme à sa cousine Madeleine," by Edmond About. M. About is well known as a writer of clever novels, a number of which have been translated and largely read. But M. About is eminently a journalist, and the book from which this article has been taken contains a number of his contributions to various Paris journals, and has never been published in English. The letters are supposed to be written by an unsophisticated countryman to his cousin, and possibly they give a better idea of M. About's cleverness than do any of his novels.]

rived at Baden with twenty sous in his pocket, and that he left it a millionaire, I smiled gently, and thought within myself: "Why should I be astonished? Ought not one to expect everything and anything from a country governed by the most magnificent of monarchs? This Bajazet or Benazet whom the newspapers extol to the skies, this prince who gives the most splendid *fetes* in all Europe in *salons* worthy of Louis XIV., this friend of the arts who orders comedies and *operas comiques* for the amusement of his court, this sportsman who throws fourteen thousand francs in the straw to a hound who has run well, ought not such a man to do something for unhappy Italy?" That, my dear cousin, is the opinion of Baden and its sovereign which I had formed from the newspapers. I presume that all Frenchmen hold the same opinion, since, like me, they all go to imbibe the truth at the same spring.

You will readily understand, then, the irresistible desire which, one beautiful morning, impelled me toward the little town and the great man of whom the people spoke in such glowing terms every summer. I shot forth like a cannon ball—or like a defaulting cashier. So great was my haste that I even forgot to go at midday to see the performances of the wonderful clock at Strasburg. When the Kehl omnibus approached the right bank of the Rhine, my heart beat fast, my eyes were moist; I cried out within myself: "I salute thee pensive Germany, abode of good faith and of simplicity! country of naïve virtues! sanctuary of innocent sovereigns. Receive to thyself a stranger that chance has caused to be born in France, but who deserved first to see the light, surrounded by honest Germans!" Perhaps I thought a little too loud, for all my fellow-travelers began to stare at me, and my neighbor held out his hand to me and said: "Sir, we were made to know one another—grasp my hand!" As he spoke the German language very badly, I recognized in him a German of the Grand Dukedom of Baden. At the first glance both his face and his costume pleased me. His features seemed to have been sketched in with skillful strokes of a knife by some artist of the country. His feet, long, broad and flat, were of the sort which rest heavily on their native country and cover a vast space of the natal soil. When I tell you that he had on black woolen stockings, breeches of blue cloth, a red waistcoat with brass buttons, a coat hanging down to his heels and an otter-skin cap, I hope you can picture to yourself this old German of the golden age. We soon made each other's acquaintance: throw me in the way of a noble man, and in five minutes I will make of him a *riend*. He offered me a glass of beer so cordially that I lost the train with pleasure by following him into his house. It was a shop, well provided with merchandise of every kind and of every country; wines, *liqueurs*, glass articles, cigars, books, groceries, cutlery—everything was in this shop. His politeness obliged me to make some purchases. I

took a fancy to some Bohemian glass that I detested, for my *étagère*, but the custom-house duties to be paid prevented me from taking them. "Do not let that deter you," cried my new friend, "we will get them through without the permission of the custom-house."

"By smuggling?" I asked.

"Certainly."

"In heaven's name is it possible! Honest German, do you smuggle?"

"Alas! sir," he answered, "what advantage could I derive from being a German, if I did not?"

I remained confused, for, according to my ideas, the smuggler is a thief. However, I did not want to tell the excellent man so, for fear of afflicting him.

"So you cheat the French Government out of all their duties upon your imported goods," I asked, with an indifferent air.

"I flatter myself I do, and every German reasons as I do. We love the French as individuals, but we do not love the Government of France. To oblige the individuals, and at the same time cheat the Government, is a double pleasure."

There was something so specious in this argument that I was dazzled.

"I hope at least," said I, that you abstain from cheating your own Government." He gazed at me as if he did not understand me. I developed my question further: "Here," said I, "you have champagne, brandy, Havana cigars, English razors and tea; I doubt not that upon all these foreign articles duties have been paid to Bajazet, or, I should say, to the Grand Duke's Government."

The worthy German roared with laughter, and I laughed with him without understanding why.

"Those things," he cried, pointing with his finger to the articles I had named, "are all as German as my hat: not one of them is from foreign countries."

"What!" I exclaimed, "this champagne wine does not come from Champagne?"

"Is there such a district as Champagne?" he asked incredulously.

"This brandy is not cognac?"

"We make it ourselves, and, really, it is as good."

"But your English razors, your Havana cigars?"

"They are German-English razors, and Havana cigars made in Hamburg."

"And the tea?"

"German, also, my dear sir, and long live noble Germany."

I was seriously astonished, and I commenced to say to myself that truthfulness varies with climate; for, in truth, a Frenchman

who would do this sort of a thing would not be considered an honest man, and the courts would condemn him for making false representations in regard to his wares. I regretted having led the conversation to such delicate ground, and, to turn the subject, I began to look over the books on his shelves. All our novelists and writers were represented there, from M. Merimee to M. Xavier de Montepin.

"Surely here, at least, are French goods," I cried with relief.

"French, if you will," he replied; "it is possible that these books were written in France, but no one can dispute with us the honor of having printed them."

"Great heavens!" I exclaimed, "they have been pirated!"

"Ah, my dear sir," said he, "you do not understand German patriotism."

I felt myself blushing all over. In my opinion, my dear cousin, pirating is the most infamous of all the varieties of stealing, because it robs only the poor. * * * * I had only trodden the sacred soil of Germany for an hour, yet I had still had time enough to become acquainted with institutions very different from our own. Smuggling, counterfeiting, and other things equally unexpected, showed me this beautiful country under a new light. My good opinion of the German people remains unchanged, since one does not forget in a day thirty years of sympathy and admiration. Nevertheless, I felt, in the bottom of my heart, a vague uneasiness; I was anxious to reach Baden, whose reputation, according to the newspapers, is so pure. I took leave of my host, who appeared to say good-bye to me with regret.

"So you intend to leave without having chosen anything out of my shop. I am extremely sorry, not for myself, however, but for you."

"For me! I will not leave you until you explain to me what you mean by that," said I.

"Nothing can be more easily explained," said he; "the money that you spend in my shop will be so much saved, and that which you carry with you to Baden will be so much lost."

Why did I not believe the honest shopkeeper of Kehl? Why did I accuse him of calumniating the institutions of his country and the great men of Germany? How much wiser would I have been had I emptied my purse in his shop! I should then have brought back to Paris some common-place purchases, but, at least, I should have brought back something. In spite of the auguries, I set out for Baden. The first object which I perceived at the station was a *suisse* in livery, cane in hand, an emblematic personage who symbolizes the majestic slowness of the German railways.

As the distance between Kehl and Baden is very short, we were made to change cars three times, in order to lengthen it somewhat. We traveled quietly along, through a dull country. Some

little bare-footed village children amused themselves by running along the road and passing us from time to time. Finally we arrived. At the first sight of the city, when my poor money jingled still in my pockets, the *environs* of the city appeared to me to be charming, and almost as beautiful as our Vosges country, that Frenchmen know so little about. There were hills covered with woods, stretches of green sward, and a little river that looked as if one could easily pour all the water out of it. The town itself, as well as I could judge of it, seemed to be made up of decent-looking inns, surrounded by little gardens.

As I was without luggage, I made my way along the streets with perfect ease, my hands in my pockets, and following the crowd. Everybody seemed to walk on one side of the street. I passed before a huge building, covered over with large and very bad paintings, and, for a moment, I took it for the palace of the sovereign; but the crowd did not stop at it, and no one entered it. Was it the wretchedness of the paintings which frightened people off? I cannot say. An obliging man told me that this building contained a mineral spring but no one knows yet whether the waters are good or bad, since no one has yet had the curiosity to taste them. I walked on, and arrived before a large hall, decorated with flags. The national colors are yellow and red, which, though by no means harmonious, are nevertheless bright and gay and remind one of a harlequin's dress.

Some workmen were hanging colored lanterns around the arch of a monument; others were preparing for fire works. A notice pasted on a wall announced for the evening a grand ball and theatrical performance, and horse races for the next day. These signs of munificence reminded me that I was in the capital of M. Benazet. The public square was dotted over with people, among them many of my acquaintances, poets, philosophers, journalists and artists, who promenaded there as if they were on the *Boulevard des Italiens*. A friend joined me and made the tour of the square, pointing out to me the distinguished personages. They were from all parts of Europe.

I saw five or six really beautiful women, whom nobody seemed to notice. On the other hand, there was a crowd surrounding two or three old women, with red, wrinkled faces, and a faded look about them, as if they had traveled in their trunks up to the age of fifty years. Upon a second inspection, I remarked that all the faces were dull, if not sad. I had not expected to find the public so serious in the midst of such an ocean of pleasures. Two members of the Jockey Club, arm in arm, passed by on my right, and one said to the other: "*She* has taken from me a thousand *louis* in two days." "I have been more fortunate," said the other; "*she* has taken only five hundred from me." *She?* which *she*? This unknown woman interested me. I fell

in with a group of journalists and play-writers, who were talking of the same person, but without naming her. One complained of having given *her* six hundred francs; another, that *she* had taken from him the price of eighteen newspaper articles; a third, that *she* had despoiled him of all his author's rights for the season. *She!* always *she!* I did not dare to ask the name of so dangerous a creature; they would only have laughed at my ignorance. Six o'clock came at last, and I found myself very hungry, so I went to a restaurant—called in this country *Restauration*. I asked to be served in the German style, from which the waiter seemed to understand that I wished to be served with extreme slowness. I waited twenty minutes for a chair, and the dishes followed after about the same delay. * * Nevertheless, I dined, and I made the very worst meal of which I have any recollection. Ah! this certainly was not the table of M. Benazet, of which I had read so much in the papers. I wanted very much to make the acquaintance of this great man, to give him an opportunity of inviting me to dinner. It was he, at last, who regaled me at dessert, since, without quitting the table, I saw his fire works, and they greatly delighted me. I called to me a Paris correspondent, who entered the room, and I told him in glowing terms of my admiration for M. Benazet, and of my gratitude to him.

"You are right," said he; "he is the best, the most friendly and the most generous of men." Having finished my dinner, I promenaded in front of the Grand Hall, under its brilliantly illuminated portico. I have the digestion of a philosopher, and especially after a very bad meal, as you, my dear cousin, know. I said to myself that the Manicheans must certainly be right when they say that the world is divided between and ruled over by two opposing influences. For here, on one side, is an evil creature, who spends her whole time in reducing men to poverty; and, on the other side, here is a benefactor of men, who marks each day by some new and unexpected liberality. But who is this evil creature? A passer-by, tumbling against me, gave me the answer.

"Scoundrel," he cried, "*she* has shipwrecked me; I have not thirty francs to take back to the shop."

"*Who,*" I excitedly exclaimed, at the same time seizing him by the neck, "who is it that has robbed you of your money?"

The commercial traveler replied with a *brusquerie* which was very excusable: "What an idiot the man is! Why the *bank*. At the same time he pointed me, with his finger, through an open door, to a large table surrounded by people. I went in to see what was taking place, and I comprehended in a short time that the bank was a being endowed with reason; a pure abstraction, if you will; but an abstraction that carries off money from many an unhappy wretch. The honest shopkeeper of Kehl had spoken to me of it, in cautious words, but I had forgotten what he had said. I

was an innocent spectator of the battle between the bank and the players. My neighbor was playing, and was so fortunate as to win in a few minutes a round sum. His example led me on. I saw plainly that with moderate good luck, it would be easy for me to make the bank pay all the expenses of my trip; and what a pleasure it would give me to tell my friends in Paris that I had seen M. Benazet face to face, and that the privilege had cost me nothing! I began, then, to play in a very small way; but the devil was probably on my side, for I lost at every throw. Or rather, no; I gained once ten francs which were dragged in at the next play by some man or other, and, on another occasion, a beautiful *louis d'or* fell to my share, which I saw a very respectable-looking lady carry away with her. I hoped still that fortune would come around to my side, and that my neighbors would allow me to profit by it; but my purse was exhausted sooner than my vein of bad luck, and I found myself without a *sou*. The removing of my financial resources from my pocket to the keeping of the bank was an affair of about half an hour. All my money had gone to increase the size of a huge pile, in which I no longer recognized even my own *louis*. I remained an instant utterly confused, and not having a clear idea where I should pass the night. A little timid German glided in front of me, and put down five francs on the table, which was immediately lost. But, at the same moment, an agent of police tapped the little wretch on his shoulder, and led him away into a corner. I followed them, and I heard the police agent say: "This is the second time that I have apprehended you here. On the first occasion, a chance of amendment was offered you; to-day your position is a different one; you go straight to prison." Nothing could be more unjust than these menaces; for, truly, the poor creature had played and bravely lost his money. I resolved to take up his defense, and to prove to myself that one could do a kindness to a neighbor even when one is not worth a copper. But at the first word of my pleading, the agent answered me sharply: "Mr. Stranger, this is none of your business; this man is an inhabitant of Baden; the inhabitants of the town have no right to play, and I am paid to prevent them." "Heavens," I cried, "you ought to have rendered me the same service. You must have a very poor opinion of the bank, since you prevent it from ruining your own citizens. You are sure, then, that the bank must win at every stroke, and that is the reason you hand over to its tender mercies innocent strangers, like myself, whilst you protect your own countrymen from it. I will write to my cousin, and tell her all about it, and that will modify her ideas of German loyalty."

That which afflicted me the most, my dear Madeline, was not the loss of my money, but that I was compelled to leave Baden without seeing this good M. Benazet. For, in truth, I had not a

moment to spare, if I would profit by my return ticket ; so I took flight at once. Cursed bank ! Villain of a bank ; it has deprived me of the pleasure of knowing the Louis XIV. of our age—the most magnificent of the benefactors of humanity. If Providence would arrange admirably, it would place M. Bénazet at one end of Europe and the bank at the other ; and I certainly should never wander into the country of the bank, but I would go each year to admire the charming *fetes* of M. Benazet.

QUEEN MARY AND HER SLAYERS.

IN the great assize of history, there are cases which it would seem can never be settled and disposed of. Called by the crier, from session to session, the counsel on one side or the other is not ready ; important witnesses are wanting, or, more frequently, the panel lacks completeness, and cannot be filled because every one who is summoned "has formed an opinion." Such is the case of Mary, Queen of Scotland. Every writer may be sure of a hearing on this subject of universal interest : it has been so for three hundred years, and will be so while Time shall last. The most skillful pens have touched, but not exhausted it : her history is well known wherever civilization has spread : it lives beyond the vernacular, in the German drama of Schiller, and the impassioned Italian of Ristori ; and her name mentioned in a promiscuous party is a battle cry of great and instant potency.

It is not my intention, in this short paper, to do more than notice a few of the verdicts rendered by the historians ; and the expression in which they are given, with particular reference to her latest and most persistent accuser.

But let me first state her case very briefly. A Scottish queen, the niece of the powerful Guises, she was educated in France, and was from the first designed as a passive political instrument in their hands. A French historian, not in her interests, calls her, "*une merveille de beauté, de grace, d'esprit et d'adresse, au service d'une nature violemment passionné.*" Married in 1558 for political reasons to Francis, the Dauphin, and afterward King of France, upon his death in the next year, she was again put forth as a puppet. It was proposed to Henry of Navarre that he should have his mar-

riage with Jean d' Albert annulled and espouse Mary; again she was offered to Phillip II. of Spain, or to his son, Don Carlos, and to one of the sons of the German Emperor. Martin says, speaking of the Guises: "*C'ltait leur appât universel*;" a phrase that is revolting to every sensitive woman. Poor queen—or rather, poor girl!

She left France for her hereditary kingdom of Scotland; which, in reality, she never governed a single day. In exchange for the light, airy, joyous, and to some extent, frivolous and immoral atmosphere of La Belle France, she found savage manners, religious gloom, political turbulence, conditions imposing a task beyond the powers, not simply of a woman, but of a man distinguished in war and in state-craft. She was the heir apparent to the English throne; and, only adopting the attainder upon Anne Boleyn's issue, which Henry VIII. had himself established, had written herself Queen of England. Thenceforth, although she had withdrawn the claim, she found herself the opponent of a woman cleverer than she was, but as false and tortuous in her policy as any woman that ever breathed. Elizabeth was afraid of Mary, and determined to render her harmless or to destroy her. Amid such conditions the queen-regnant of Scotland, and anointed Queen of France, was by no means to be envied. Her very charms were a snare; men fell in love with her whether she would or not; and she was by no means free to choose her mate. The question of her marriage was a state question, in which Elizabeth constituted herself the arbiter. Who should be the hero of the fated nuptials? Not Leicester, the wife-killer, the superseded favorite of Elizabeth? She must not marry a Catholic, for John Knox denounced that in thunder tones. She settled the matter by marrying her first cousin, Darnley, who had nothing to commend him but his lineage. His mother was half sister to James V., and first cousin also of Elizabeth. She married him from policy, and finding him to be an utterly hateful creature, hated him. No one had pretended that she could marry for love.

Mary was a Catholic of the Catholics, and who can blame her for being attached to her faith. She asked but little—that she and her attendants, and the Catholics of Scotland, might have their own worship; but she could not keep out of the fierce polemics of the day: it was natural that she should be considered

the rallying point of Romanism, and that the Pope and Philip II. should urge her to restore the ancient faith. Here she was met with violence and invective. The rude, vindictive, unchristian treatment she received at the hands of John Knox, might have well turned the kindest spirit to gall.

Once more: the daughter of a king, a queen dowager, a regnant Queen, she had always had a right to form her court, and select her officers. Among these was Chatelard, who fell madly in love with her, and exhausted his insanity at the block. That she charmed him, is true; that she was in any way criminal, has not a shadow of proof.

David Rizzio, an Italian musician, was so much better educated than the rude Scotchmen around her, that she made him her secretary for French despatches: she admired and trusted him. A pack of blood-hounds, at the instance of her debauched husband, slew him before her eyes, while she was *enccinte* with Darnley's offspring, afterward the rickety James I., of England. To effect their entrance quietly, Darnley betrayed her with a kiss, and John Knox, with the spirit of St. John, consented to his death, "for the glory of God and the advancement of religion." "The Church of God," he said, "must be saved, even at the price of an idolator's blood."

Her worst enemies, if they do not acquit her of crime with Chatelard and Rizzio, acknowledge that they are without proofs. And there she lived with a vindictive scrutiny on her every action, constant endeavors to entangle her in her talk, no church, no friends; a plotting rival in England; a treacherous half-brother, whom she had loaded with benefits; a husband, so mean that he was despised as well as hated—he was an object scarcely worthy of hatred.

We might rest the statement here; we might say, self-defense will warrant desperate acts; we can hardly wonder if she meets plot with counter-plot; and if she consents to rid the earth of her cold, mean, relentless enemies—"Oh, no," cry her foes, "let *them* scheme and lie, and torture and kill; but, fie! *she* should be immaculate."

But the case is not yet fully sketched. Badgered, hunted down, counseled falsely to do questionable acts, of which the counselors were to take advantage; she listens to one, to another; be-

comes confused, and at times almost desperate. Revenge would have been but too natural. At length, her husband, lying sick in the Garden-house of Kirk-in-the-fields, is blown up with gun-powder, during her absence: Bothwell is accused of the deed, and Bothwell has been her friend and confident. It has never been proved that she had complicity with this act, but she was at once treated as the murderess of her husband; for, partly from affection and partly by force, she married Bothwell. Then followed her confinement, with murderous intent, in the castle of Loch Leven; her escape with the connivance of Douglas; the battle of Langside, and the fatal step, while she was seeking for the protection of Elizabeth, put her in Elizabeth's power. She might have gone to France. Her woman's heart sought a nearer sympathy, and found an assassin. The story is too well known to need re-telling, how the lines of durance were drawn closer and closer, until the logical end of the imprisonment at Fotheringay was manifest to all—the scaffold. Denied a hearing, stripped of friends and counselors, for nineteen years she suffered. Every plot was laid at her door; the tissue of lies was slowly but strongly woven, and the end came. If I am asked if she really was an accomplice of Bothwell in the killing of her husband, I can truly answer, "I do not know." The matter was never adjudicated; history deals like a court of law, and declares her innocent in default of proof. But if she was a party to the act, I can point, in palliation to her own great wrongs, to the vile character of her husband, and to the stormy days, when reform in religion by no means excluded revenge, and when the sword had no touch of celestial temper. She hated and despised Darnley, and had cause to hate him; and his death was not otherwise than a relief and a joy to her. She loved Bothwell none the less that he had rid the world of a miscreant; and she had, besides, for that bold, bad man, something of that infatuation which attaches such a woman as Minna Troil to a corsair, or Bulwer's heroine to Paul Clifford. As for her complicity with political plots during her English imprisonment, who shall blame her? It was liberty, it was life she sought for; and any postern by which she might escape was eagerly sought and welcomed.

Of the greater crimes imputed to Mary, I believe her innocent, but if ever a woman was tortured into error it was she. In an un-

decided case, opinions are as numerous as blackberries; I mention a few of the most prominent in history.

In her own day, wrote and spoke John Knox, doubtless a man of strong mind and great courage, but a bigot, far more intolerant than the Roman Catholics themselves. A professed convert from the Roman church, it was he who reconstructed the kirk, and who, not content with this, attacked the queen, in her faith, in her claims as a monarch, in the customs of her household. It was he who blew a "blast against the regiment (or rule) of women;" and the "monstriferous empire of women." It was he, who, by the violence of his reproaches, "made her cry and 'owl,'" so that the chalmers-boy could not supply napkins enough for her tears. That he had been a priest is not in his disfavor, for Protestantism sprang from converted priests and monks; but it is a reproach to him that he reviled a royal woman in opprobrious terms, in conversation and from the pulpit; that he advocated death for hearing mass; that he praised the murderers of Rizzio; that he advised her own execution; that from first to last he was her enemy, hunting her down like a forest deer, with horn and hounds, with no touch of Christian mercy or pity.

Next in order comes George Buchanan, who had been her own instructor, and was afterward tutor to her son. He had been in turn a Catholic professor and a Lutheran heretic. In 1570, he sided with the Regent Murray, and the same pen which had indicted an epithalamium on her first marriage, was employed to write the *Detectio Mariæ Reginae*, and the *De Jure Regni*, full of threatnings and slaughter.

In that same age, too, wrote Spencer, a true poet, but a courtier, who could offer nothing more acceptable to Elizabeth than a defense of the execution of Mary. Abstract justice in the person of Sir Artegal was not guilty of the deed; it was the man Talus, retributive justice, that punished the naughty queen!

I pass over the admirable biographies of Miss Strickland, which everybody has read. Hume may be disposed of with the single quotation: "She was unfortunate in her life, and, during one period, unhappy in her conduct." Robertson and Walter Scott, combining a sense of justice with the courteous instincts of gentlemen, have given the facts, and not withheld a large sympathy. Mrs. Jameson accosts the subject with a woman's heart. Among all

the standard writers on the subject, political opinion has biased private judgment. Doubtless, the loyalist, the Jacobite, the Roman Catholic, the High-churchman, have gone too far in their championship; while the Presbyterian, the Independent, the Hanoverian, have been in all time unjust and vindictive.

But of all her enemies, cool, sagacious, and determined to destroy every shred of reputation which could cover her nakedness, Froude is the most systematic and persistent. The champion of Henry VIII., the unqualified apologist of Elizabeth, he can find nothing good in her, absolutely nothing. He is not a judge, but the counsel for the prosecution, and his indictment against her is unalloyed evil. He distorts her smiles, attacks her cheerfulness, her every charm and grace are the lures of a courtesan. The court must hear nothing in her favor: "In the deeper, and nobler emotions, she had neither share nor sympathy." "She thought of nothing, cared for nothing, except as linked with the gratification of some ambition, some desire, some humor of her own." He contrasts her with Elizabeth, who, "with a general desire to do right, could condescend to poor and mean manœuvres." Who dares to make such sweeping judgments? Mr. Froude would find it hard to convict the devil himself, if such a tender heart as that of Robert Burns was at hand to challenge the proofs.

There is, perhaps, no finer picture to be found in any professedly historical work than Mr. Froude's description of Mary's execution. It is consummate, the scene is fearfully vivid; but the picture is out of place, it belongs to a romance; for it is not the province of the historian, as it is of the novelist, to enter into the hearts of his characters and set forth their every thoughts; and yet Mr. Froude has regaled us with the workings of that sad but voiceless heart, and his work is full of false assumptions and perverted meanings. It maddens him that when her sentence is conveyed to her by Buckhurst *she refuses to confess her crime!* The paltry removal of the insignia of royalty, caused her to say, with dignity and firmness, that "she was an anointed queen, and man could not take the rank from her: she would die like a queen." "Her ingenuity," says Froude, "was never at fault: where the arms of Scotland had hung, she suspended a crucifix for answer, and pointed to it when he next entered." How theatrical! "She was determined, if die she must, she would give her death the

character of martyrdom." "As a martyr she might, like Samson, involve her enemies in her ruin, and purchase pardon for her last alsehood, by giving victory to the church."

What assertions are these, made of a poor, lorn, worn woman, who had received every kind of contumely, and had for years been in constant fear of death from a treacherous rival! What assumptions are these of the thought and intents of her heart, as the fatal end drew near! The historian finds little that is strange in Elizabeth's conduct: "For herself, she honestly preferred incurring personal risk to taking her kins-woman's life, *and if a loyal subject relieved her from embarrassment, in reliance upon the act, by killing her himself*, it might disarm the resentment of France and Scotland, and give James and Henry an excuse for refusing to quarrel with her." That means secret assassination by dagger or poison! "Fatal necessity of mistake!"

But, let us look for a moment at the closing scene, and see what thought he puts into the victim's mind. "Yet in death, if she encountered it bravely, the victory was still possible. It would be affectation to credit her with a genuine feeling of religion, but the imperfection of her motive exalts the greatness of her fortitude; to an impassioned believer, death is comparatively easy." They refused her the Roman Catholic sacraments; they forced upon her the attendance of an Anglican dean. Her dress, which is elaborately described, is denounced as a theatrical stratagem. It was a crimson robe of silk and velvet, befitting her royalty, and may have been adopted also to conceal the flowing blood. Mr. Froude does not say, besides, that it was perhaps the only one she had reserved to herself, and that she told her maids she would have left them even that, but that it was necessary for her to appear at the ensuing solemnity in a decent habit. He says she should have worn a simple gray dress! On the scaffold she was denied the presence of her chaplain, and of her lady-attendants, and she earnestly solicited their being admitted for this (Mr. Froude's) reason, "she could not afford to leave her death to be reported by enemies and puritans, and she required assistance for the scene she meditated." I cannot help thinking that this lonely, desolate woman may have wanted the consolations of her religion, and a glance of affectionate sympathy in the supreme hour. They worried her with protestant services, but she turned her back, prayed

aloud for the church and the Pope, and recited penitential psalms in Latin. Protestant as I am, I find her conduct throughout exceedingly noble, and exquisitely beautiful.

The executioner struck, and the drama was at an end. Shall we cover up the poor corpse, or shall we parade with satisfaction the scars of two abscesses on the headless shoulders? Shall we glory in the metamorphosis of the lovely head, shorn of its coiffure, into "the withered features of a grizzled, wrinkled old woman?" It would be ignoble. Cover her, and bury her out of sight. If you have no tear to shed, commune with your own heart and be still.

We have kept no space in which to notice the powerful and eloquent research which *M. Meline* has displayed in his rejoinder to Mr. Froude. Not only the friends of Mary, but the lovers of the true in history, must give him hearty thanks. Nor can I do more than mention an exhaustive work by *John Hosach*, barrister-at-law, entitled *Mary, Queen of Scots, and her Accusers*.

I have written these pages *currente calamo*, and with very little consultation of books; the value of this article, if it have any, must be found in the biographical list which I subjoin, and which will be of service to any of our readers who wish to study the subject in detail. They are a few of the rarer books among hundreds on the same subject.

J. Hill Burton—History of Scotland. 6 vols.

J. Anderson—Mary, Queen of Scots. 4 vols. 4to. ed. 1727.

Elizabeth Benger—Life of Mary, Queen of Scots. 2 vols. 12mo. 1823.

H. Campbell—Love letters of Mary to Bothwell. 1 vol. 1824.

Effusions of Love from Chartelar to Mary. 1 vol. 1805.

Evidence against Mary, Queen of Scots. 1 vol. 1760-7.

J. Freebairn—Life of Mary, Queen of Scots. 1 vol. 1725.

W. Goodall—Examination of letters, said to be written by Mary to Bothwell. 2 vols. 1754.

Marie Stuart, Lettres et Mémoires. 7 vols. 1845.

The Other Side of the Question, or an Attempt to Rescue the Characters of Queens Mary and Anne. 1 vol. 1742.

The Royal Exile; poetical epistle of Mary, Queen of Scots. 2 vols. 1822.

Trial of the Duke of Norfolk, for attempting to marry Mary, Queen of Scots. 1 vol. 1709.

Von Raumer—Queen Elizabeth and Mary of Scotland. 1 vol. 1836.

J. Whitaker—Mary, Queen of Scots, Vindicated. 3 vols. 1787.

HENRI DE COISSY.

HERESY AND HERETICS.

WE call our world the planet Earth. That is, it is a wanderer. But it is a very orthodox wanderer, for it keeps close to its creed of the two opposite laws which, striving with it incessantly, enable it to whirl along upon the wide race-course of its orbit. Our friend, the Comet, is rather the greater wanderer of the two, and he is more properly the type of the normal heretic—only the initiated know when and where to expect him. His creed is the most radical of all free religions. He moves up and down through space, crossing planets' orbits, stars, and constellations which have been fixed apparently from all eternity. The comet is always an interesting creature; he has looked upon all sorts of worlds we have never dreamed of, and all sorts of worlds have looked upon him; he has shined upon others, and others have given him back their shining in return; he has cut his way through all varieties of constellations and all combinations of laws, free and independent as the north wind, but yet weaving his orbit as the spider spins her thread, and reappearing on his line again after the flight of centuries!

And so, too, the great world of mental and moral thought is a planetary body—a wandering world. It has its laws and its orbit, and philosophers, like Buckle, take the telescopic glass of prophecy and tell just when and where certain views will reappear and cross the line of other views. There is a world of thought which is fixed and settled; there is a world of thought which, in character, is wandering and irregular. If we now lift this subject into the sphere of religious thought, we shall have, as the two opposite categories, the creed of the planet and the creed of the comet. Leaving out of our investigations the world of orthodoxy—for every man who truly believes is orthodox in his own eyes—I come to the subject of the present paper: "Heresy and Heretics." Truly has Tertullian said: "The first thing which it is necessary for us to believe is, that we believe nothing lightly."

The gay, flippant heretic, who skims over great truths and depths of thought—a merely cultivated connoisseur, who, in the easy elegance of his amateur habits of thought, finds a little good

and a little bad in every form of faith, and stands in his intellectual foppishness above them all—has no place in this paper—has no charms for me. As Coleridge once said: “Such a man does’nt *find me*.” Nor can I include within the range of heretics, who charm us with the sincerity and outlawry of their faith, men who have no faith, and must have everything embraced within the all-concluding grasp of their scientific classifications. The man whose brain is one vast collection of pigeon-holes, where every fact has its receptacle, and where that which cannot be accounted for and understood has no place, is no heretic, no wanderer; he has nothing to wander from. There is no borderland, no twilight hours of mixed fact and faith with him. He lives always on the stroke of twelve, in the full-orbed face of time, until the striking and the running weight are stopped by an unseen hand he has never been able to classify or explain. It is of such as these that the poet Wordsworth has written:

“I’d rather be
A Pagan suckled in a creed outworn,
So might I, standing on this pleasant lea,
Have glimpses that would make me less forlorn,
Have sight of Proteus rising from the sea,
Or hear old Triton blow his wreathed horn.”

Doubt is twofold in character. It is the Janus head of knowledge, and looks backward to despair and forward into hope and further knowledge. Peter doubted, and yet became the cock of the early church; Judas doubted, and his doubts wore that cord by which he went in his despair and hanged himself. St. Paul hints, in one place, of the possibility of such a thing as an “evil heart of unbelief;” that is, of the crossing of the moral and the mental planes at such an angle, that we may believe a thing or disbelieve, simply because we wish to do so. Here, the condition of the moral will inevitably tinge the mental state. Thus a belief or a disbelief may rest, after all, upon the condition of the will. But leaving this phase of our subject, upon this, its metaphysical and theological side, let us then throw overboard from the interesting class of heretics, those whose heresies spring from their moral state, and are the result of certain conditions of the will. Thus our Gideon’s band of doubters becomes purged of all who are insincere and lukewarm. We have cast out into the

rough outside sea of general badness the superficial amateur heretic, the man who has no faith or creed at all, and the man who believes in error because he wants to believe in it. Let us trust that our cargo of thought will be lightened by their riddance, and that we shall sail on smoothly together, now that these disturbing Jonahs are safely deposited in the belly of the avenging whale, which always follows in the wake of the world's wanderers, who, knowing they ought to sail eastward to Ninevah, yet deliberately sail westward to Tarschish. Lord Byron speaks in one place of the delight with which, in the crowded art galleries of Italy, he turned

"— from grizzly monks and martyrs hairy
To the sweet pictures of the Virgin Mary."

Perhaps we may experience a somewhat similar relief, if we, too, turn from the grizzly annals and wearying statistics of this vast subject to the sweeter pictures of individual character. Remembering that we have omitted from our catalogue of heretics all the unworthy and insincere, those who can be classed with the flip-pant, and the unbelieving, and the evil hearted, let us briefly look :

- 1st. *At the heresy of temperament*, or what we may be naturally.
- 2d. *At the heresy of our surroundings*, or what others may have made us, and
- 3d. *At the heresy of experience*, or what we may have finally made ourselves.

These categories may possibly overlap each other, and in some cases meet in almost equal proportions, but still they are sufficiently separate and distinct to serve for our present purpose. When we come to give a definition of heresy, and the heretic, we will find it a more difficult thing in these days of critical free thought and untrammelled right of private judgment, than it was a century ago. A writer of to-day complains that the old definition of God has gone, and no new one has taken its place. Perhaps this is true of the heresy idea. Schism-excommunication, the uncovenanted mercies, these are to many minds only the garments of the past, interesting relics of religion. They stand like heraldic armor, and cross-bow and helmet, belonging to an age of chivalry, which, while interesting and curious, is now effete. And yet every man draws the line somewhere between that which he considers truth and that which he calls superstition and error. As

Carlyle has written: "It is well said in every sense that a man's religion is the chief fact with regard to him. By religion, I do not mean here the church-creed which he professes, the articles of faith which he will sign, and in words or otherwise assert: not this wholly, in many cases not this at all. We see men of all kinds of professed creeds attain to almost all degrees of worth and worthlessness under each or any of them. This is not what I call religion, this profession and assertion which is often only a profession and assertion from the out-works of the man, from the mere argumentative region of him. But the thing a man does practically believe (and this is often enough without asserting it even to himself, much less to others), the thing a man does practically lay to heart, and know for certain concerning his vital relations to this mysterious universe, and his duty and destiny here; that is in all cases, the primary thing for him, and creatively determines all the rest. That is his religion, or it may be his mere skepticism and no religion; the manner, it is, in which he feels himself to be spiritually related to the unseen world, or no world. Of a man or of a nation we inquire, therefore, first of all, what religion they had. Was it creationism—plurality of gods and physical force? Was it Christianity—faith in an Invisible, not as real only, but as the only reality—Time through every meanest moment of it resting upon eternity—Pagan empire of Force displaced by a nobler supremacy, that of Holiness? Was it skepticism—uncertainty and inquiry whether there was an unseen world, any mystery of life except a mad one—doubt as to all this, or, perhaps, unbelief and flat denial? *Answering of this question is giving us the soul of the history of the man and of the nation.* The thoughts they had were the parents of the actions they did, their feelings were parents of their thoughts: it was the unseen and spiritual in them that determined the outward and actual: their religion, as I say, was the great fact about them."

THE HERO AS DIVINITY—HERO WORSHIP.

Let us define heresy, then, for the purposes of this paper, as the protest of the minority against the creed of the majority, and the heretics by temperament, by surroundings and by experience, will be those men who have reached from the ecclesiastical standard, and, in drawing the lines differently have formed a new standard of their own. I have said, first, there are those heretics who may

be embraced in the great category of temperament. We are all familiar with those traits and characteristics which are the entail of nature; those which we have derived by birth as well as that which we have made ourselves by our own self-determining wills. St. Paul perceived in his own character two wills, two selves, struggling together through his entire life. Many a thinker, many a worker, has felt this sluggish personality of inheritance, and that other personality of conscious will-power. Dr. Arnold, of Rugby, longed as much as any one for definite ultimate truth, yet he once said to a friend that, settle matters as he would at night, there were times when, with the morning light of the morrow, everything seemed to be an open question again. Such men's doubtings have a great fascination for us. In fact, the careful student of ecclesiastical history unconsciously finds himself interested in the side of the heretic because of the charm of the life or the thought. The apostle, in his epistle to the church of Galatia, has his finger upon this same fascinating tendency, when he exclaims: "Oh! foolish Galatians, who hath bewitched you!" That is, there was a dazzling spiriting away of the calmer judgment upon the creed, by the shining of the attractive life. Men resting behind the bulwarks of the creed forget the power of the life: the doubter, on the other hand, denying the creed, speaks only by the charm of his own individuality. Nestorius, Bishop of Constantinople in the year 428, has given his name to a heresy known in history as Nestorianism, which serves as a typical instance of this heresy of temperament. He declared that it was wrong to call the Virgin Mary the Mother of God. She was only the Mother of Christ, or of man. He was summoned before a council at Ephesus, by the Emperor Theodosius, and was accused by his bitter adversary, Cyrill, of Alexandria, of greatly dishonoring Christ. Cyrill brought with him a wild surging escort of fanatical monks, very much in the way that unprincipled political leaders in our own time, bring repeaters to colonize a certain ward or county, and judgment was passed against Nestorius. The rough temperament of Cyrill was disturbed at nothing; the delicate Nestorius, troubled at the unthinking exclamations of the masses, wanted at heart, after all, to give Christ a greater honor than that he should be born a divinity, by a human woman; yet he went to the wall, and has been handed down to

posterity as a heretic. By temperament he reacted from the unthinking masses about him. Lord Herbert, of Cherburg, the purest of the English Deists of the 18th century, stands out as another temperamental reactionist. Shocked at a church submerged with state patronage, the truculent lackey to the crown, he flew to Deism, yet believing in miracles, and asking for a sign from heaven—which he says was granted him in the form of a miraculous flashing of fire—before he published his book “Concerning Truth.” His own description of this is as follows: “Hesitating whether to publish the work or not, being in my chamber one fair day in the summer, my casement being open toward the South, the sun shining clear and no wind stirring, I took my book ‘De Veritatce’ in my hands, and, kneeling on my knees, devoutly said these words: ‘Oh, Thou Eternal God, author of this light which now shines on me, and giver of all inward illuminations, I do beseech Thee, of Thine Infinite goodness to pardon a greater request than a sinner ought to make: I am not satisfied enough whether I shall publish this book: if it be for Thy glory, I beseech Thee give some sign from heaven: if not I shall suppress it.’ I had no sooner spoken these words, but a loud though gentle noise came forth from the heavens (for it was like nothing upon earth) which did so cheer and comfort me that I took my petition as granted, and that I had the sign demanded: whereupon, also, I resolved to print my book. This, how strange soever it may seem, I do protest before the Eternal God is true: neither am I any way superstitiously deceived therein; since I did not only clearly hear the noise, but in the serenest sky that ever I saw, being without all cloud, did to my thinking see the place whence it came.” These are typical cases of temperamental reaction. The faculty of spiritual apprehension changing and becoming tinged with some new experience, changes and colors the mind and the judgment and the structure of the creed. Thus the individualism of that which is a temperamental change, works out into the written-standard of faith. History is filled with examples of this class of Reactionists, who, by temperament, going beyond a certain line, are called heretics. Thus the great question, after all, for every would-be theologian is: “Where do I draw my line?”

II. The second great category I have called the heresy of our

surroundings, or that which others may have made us by their influence. It is said of Cyrus the Great, that he attempted to determine the natural language of man by shutting certain infants away from the sound of the human voice, until, in childhood, they should develop a language of their own. A theological Infant Asylum, composed of a hundred babies, Jews, Turks, India, China, Africa, England, New England, New Zealand, Malay, Russia, Tartary, Persia, all being represented by a crying committee at their foster mother's breast, and all let alone to develop an unbiassed and purely natural theology, would be an equally interesting experiment. Here, at least, there would be no place for the heresy of any one's surroundings. Temperament and the development of experience alone would have any weight or influence here. It is never fair to judge of any side alone, by the defenders of that side: it is not right to decide about a cause only by looking at the surroundings of a cause. Truth and error have many sides. Man is many-sided and receives truth and error in many twisted, complicated ways. "John the Baptist brought all Jerusalem out into the deserts to hear him; on the day of Pentecost 3,000 souls were converted by St. Peter's preaching: success like this never followed the preaching of Christ, yet Christianity rests upon Christ as the corner-stone—not upon John the Baptist—not upon the Apostle Peter. Whitefield and the Wesleys, like the classical Prometheus, indeed, brought fire down from heaven to mortals steeped in sin, men who never dreamed of any divine enthusiasm hidden in their human breasts. They went like angels of light to thousands sitting in darkness; they revolutionized the English Church, and gave to practical Christianity a new lease upon time; yet if you ask who nailed Christianity to the iron rock of abstract philosophic truth—who nailed it firm and strong among all merely human systems, from Plato down to Hegel, the answer is not Whitefield, not the Wesleys, not men of their mould, but a dull talking man, who fumbled with his fingers and mumbled with his words." (Coleridge.) So, too, you must judge of Christianity in Germany, not alone from the stand-point of Luther battling with the Pope, or of Spener and Franke, and other such mystics, struggling with the cold sacramentarianism of the Lutheran Church, but from the outlook of Schleiermacher, who first successfully passed over the bridge from Rationalism to Christian-

ity, a high and missive arch which his own genius reared. And this is equally true in looking at infidelity. Tom Paine and Voltaire were infidels. Yet we must not judge of all infidelity by these hangers-on, these mere morally abandoned camp-followers. In that political and religious reaction which followed the Cromwellian period, there appeared in England a school of materialistic and sensual deism, extending from Hobbes, through Jonathan Swift, Chubb and Bolingbroke to the old Greek Pyrrhonism or universal doubt of David Hume. Great was the cry against it; bitter was the controversy.

But there were social and speculative reasons—literary and temperamental and reactionary causes—which induced many men to go over from a dead church, and dull defenders of an old faith, to any side which seemed to have life and energy about it. Thus Shelly and Byron were snatched from a world of faith, and illogically (because the true poet always feeds upon faith) pursued their high calling. They are both types of this second class of heretics—those who naturally gravitate toward heresy more by their surroundings than by temperament or by condition. Thus they made a faith for themselves, and crowned it with the old gods of Greece, because such spirits could not feed upon the vapors in the dungeon of a blank despair. Ignorance, pride and prejudice, upon one side, are sure to spawn their offspring upon the other. This is why religious wars are the wickedest of all conflicts. The Salem witchcraft and the Spanish inquisition teach us this. Kingsley, in his story of Hypatia, shows us how the Monk Philammon was orthodox in the company of his monastery, but fearfully lax when out in the wicked world. Coleridge ascribes this same tendency to Satan:

“Now when the Devil was sick, the Devil a monk would be,
But when the Devil got well, the Devil a monk was he.”

If, then, we all live, influenced by our surroundings more than we know, and, breathing in the mental and moral atmosphere around us, give it back again as unconsciously our own, has not this heresy of a man's surroundings an important place in the history and philosophy of heresy? Is it not a category in itself?

III. And, then, lastly, to be brief, there is that *other* class of heretics; those who have adopted heresy as a matter of conviction, as the result of their experience. We all desire, above everything

else, to arrive at that point where we have some fixed and settled rule of decision. There are two ways of taking hold of a mystery ; we leave a matter unsolved or we give it a wrong solution. I may believe a fact, and yet reject a certain theory of that fact. I may believe in some mountain-like doctrines, and yet find my way over its summit by some path of my own. It is like ascending Mount Washington ; I can walk up, or ride up, or be driven up, or steam up. But where there is no choice of ways, or where I think the path unsafe, I go as the others go, or I stand off at a distance and merely look at the summit ; I believe it, because I see it afar off—not because I stand with the mystery under my feet ! There are some things we can leave unsettled in matters of faith—there are others which are essential, and must be solved in some way of our own. As I said in opening, the first principle of all earnest belief is that we believe nothing lightly. Thus we may leave a doctrine unsolved ; we may reject a doctrine because we deny a theory, or we may believe a doctrine and yet reject a theory. By the heretics of experience, then, I refer to those who have fallen into the habit of rejecting the doctrine because they deny the theory. They do not believe in the mountain because they cannot stand upon the top of the mountain.

Thus formulated heresy, settled and defended and defined, becomes its own standard of orthodoxy, and men who make the broadest generalization from their position, where a bird's-eye view of humanity can be obtained, grow angry and impatient, because all others are not as broad as they themselves. Thus it is, that established heresy becomes dogmatic. It is the Episcopacy of Charles going down before the independency of Cromwell. The orthodox became the outlaw and the former heretics seized the reins of power. Did the limits of this paper allow, I should like to show more at length, the exact position of this school of Heresy. I should like to quote from Stanley's *History of the Eastern Church*, a description of Athanasius and Arius, as they faced each other at the Council of Nice, in the year 325, upon the abstract subject of the Trinity, the one representing the best type of generous, yet dogmatic orthodoxy, the other representing the best type of manly and dogmatic heretodoxy.

They stood at the council, foemen worthy of each other's dialectic skill in a controversy, and in an age when earth and sea

and sky were ransacked for illustration, which, for definiteness, were to be clearer than the very terms to be defined. By Heresy, then, have referred to the reaction of the minority against the creed of the majority: the denial of that creed, and the substitution of a new one. It is, in short, a theological nebular hypothesis, the old creed whirling on its logical axis, throws off incandescent worlds of thought which, finally, it may be, become fixed. Unless the heretic becomes fixed in his faith, as I said before, he is a comet, rather than a planet. I have been speaking, you will remember, only of honest heretics; these we respect; others only cumber the ground of thought.

After all that can be said, we can only conclude with Robert Browning, as he soliloquizes over the dead body in the *Morgue* at Paris, that picture of life's apparent failure;

" Its wiser being good than bad;
Its safer being meek than fierce;
Its fitter being sane than mad;
My own hope is, a sun will pierce
The thickest cloud earth ever stretched;
That after last returns the first,
Though a wide compass round be setched,
That what begins best can't end worst,
Nor what God blessed once—prove accurs'd.

W. W. N.

THE LOAN EXHIBITION IN MILAN.

THE rapid and successful growth of Loan Exhibitions in Great Britain has been pretty well chronicled in our newspaper columns. The capital way in which the same generous and useful spirit has been evoked in the towns of the continent, has received less notice in this country. One of the great attractions for visitors fond of art and archæology, in the lesser European cities just now, is the rapid succession of Loan Exhibitions. At Ghent, the venerable and beautiful Hotel de Ville, just being restored with admirable zeal and fidelity, was filled with objects of art and art history characteristic of that town, once the great industrial capital of the Flemish Provinces.

The "Guilds" exhibited their Banners, some of them the venerable and veritable standards borne in their wars for independence; the corporation loaned its fine series of charters, and the keys of the town, presented to the long succession of sovereigns who had thus received its homage; the great church authorities loaned the mediæval treasures of church art, missals, early gold-work and banners of real artistic merit. From private owners come just such rare treasures as one longs to see, for the very houses speak of old collections hid in them, Venetian glass, early pottery, reliquaries of all kinds, and pictures with names of note of all schools.

Another and a greater exhibition of the kind, is that opened at Milan, in the Palace of the Brera, that fine treasury of the Fine Arts, as a sort of pendant to the "Second National Exhibition," which has at least the merit of great size and great success, but to an art-loving traveler is of far less interest. The one counts over a thousand numbers, exhibited to great advantage in a fine building in the public garden, but it tells the old story of modern art, its unsuccessful strivings for novelty, its unrest, its discontent, over and over again. The Loan collection of works of ancient art counts only about two hundred and fifty numbers in its catalogue, and is crowded rather unceremoniously and confusedly in the extra rooms of the Brera, leaving the famous gallery still open as part of the great exhibition. These two hundred and fifty numbers do not, however, fairly or nearly represent the whole number of objects on exhibition. Whole cases of treasures of art are classed under one number in the catalogue, and, sometimes, with one general head. There are bits of real art, and bits of old art, and bits of bric-a-brac, and bits of little or no value, all together, by reason of the convenience of having them all in some great old carved sideboard or wedding chest, such as are found in all Italian, and, nowadays, in many American households. The very names of the exhibitors tell the story of Milanese greatness and Lombard history, and not a few of the works of art have that curious interest which belongs to illustrations of past art and life, heightened by being exhibited by the descendants of the persons whose achievements are thus recorded. The Borromeos, who are, as Milan dates go, rather a modern family, not having any great history back of the XV. century, shine rather by the extent of

their treasures and the liberality (characteristic of the family) with which they loan them. Two great rooms, out of the eight which hold all the exhibition, are filled with their collection—pictures by Luini, by Gaudenzio Ferrari, by Leonardo, by Durer; illuminated manuscripts and missals; relics of their sainted and saintly ancestor St. Charles, in rock crystal and carved woods and ivory and precious stones; old banners of great events in the history of the family or of the city with which their name is so honorably connected by their share in its new growth; tapestries from France and Holland, recording contemporaneous family events; arms, some borne by the same ancestors who smile so sweetly from their wooden portraits, some captured by them from the very enemy defeated in the pictures around, and all curious and interesting. Indeed, some of the best of the works of art other than the pictures, are left to tell their own story, and it is not unlikely that the owners exhibit them rather because they make part and parcel of the family history, than from any special knowledge of their origin. One exhibitor, however, is a most grateful exception to this rule, and although the catalogue does scant justice to his collection, each article bears a little placard, giving in brief its particular claim on the attention of the spectator. The seventh room—there is surely luck in an odd number in this case—is filled by this one exhibitor, the Marquis Gian Giacomo Trivulzio, the leading archæologist of Italy, a man who has combined the love of art, which is almost common property there, with industry and zeal and generous use of all his treasures, in a way to make his name well known to all who follow similar pursuits, for he is as liberal in granting to others the use of his best rarities as he is in inviting attention to them.

The catalogue makes short work of one of the largest private collection of early manuscripts in the world—even alongside of the famous “Ambrosian Library.” This private collection has treasures of its own: missals, Psalters, illuminated A B C’s, made for a young Sforza, his grammar, the Evangelists of Francis II., a note-book of Leonardo da Vinci’s, wood cuts of the fifteenth and sixteenth centuries, bindings of the same period—these are the contents of the first case. The second has old majolica, Limoges ware, ancient gems, and other such rarities, not bought, but making part of the family inheritance, whose arms they bear, and

for whose use they were made. In the next case, there is a manuscript of Dante's *Divine Comedy*, written by Francisco Nardi, of Barberio, of Val di Pisa, in 1337. This is the oldest known MS. of Dante. There is one with the date of 1326, the Codex Landi, but it is really a copy of the fifteenth century, and the date was copied, too. There is a Dante of that date, 15th century, with commentary, on parchment; a collection of maps, on parchment, too, of the 16th century; a sixteenth century MS. treatise on Falconry, a Lucan; de Bello Pharsatico, fourteenth century MS. illustrated by Jacopo Nicolo da Bologna, and others, of the early Milanese school; a Sallust, vellum MS., of the 15th century, once the property of Pius VI., with his arms on the cover. Then there is a Suetonius on vellum, illustrated by Antonio Crivelli, of 1444, a Boccaccio, *La Fiammetta*, vellum, of the fifteenth century, with a pedigree of the Trivulzio family; Porphyry's Commentaries on the Odes of Horace, vellum MS., 15th century, with miniatures of the Florentine school, made for the library of Matthew Corvinus, King of Hungary, with his arms emblazoned on the title page; a Book of Prayers of Isabella of Arragon; the "offices" of Barbara Este, wife of a Trivulzio in the 16th century; Manderille's *Travels*, vellum MS., written in French in 1396 (?); Larcaris' Greek grammar, an author's presentation copy to Duke Gian Galeazzo Sforza Visconti; a Livy, MS., of the fourteenth century, with illustrations by artists of the Florentine school—one of the first printed copies, Rome, 1476; a Lucan of the fifteenth century; a Suetonius, vellum, of the twelfth century, with illustrations by Mantegna, of the Venetian school; a Petrarch of 1472, illuminated by Mantegna; a Cicero of the fifteenth and another of the fourteenth century, both illuminated, and on vellum; a vellum Bible of the fourteenth century; Psalter, illuminated by Girolamo dai Libri; a missal of the Duke of Berry's, of the fifteenth century, with breviaries of that and earlier dates. There was a Florentine Treatise on Music, MS., on vellum, dedicated to Cardinal Asconio Sforza, all the initials portraits, all the letters in gold on blue; a Callimachus, vellum MS., sixteenth century; a series of charters granted by the Dukes of Ferrara, to the Certosa of that city, from 1462 to 1562; a Petrarch, illuminated vellum MS., of the fifteenth century, and then there was a wonderful collection of bound books, early and rare works in the

original bindings, resplendent in gold and emblazoned with armorial bearings; presentation copies, once the property of Corvinus, of the Sforzas; a Virgil of Grolier, an original *Istruzione* of the Doge Nicolo de Ponte; an Ambrosian missal of the fourteenth century, Leonardo da Vinci's *Libro di Ricordi*, a memorandum book in his own handwriting, with his own illustrations; a missal of the Duke of Este, of the fifteenth century, with silver gilt binding and clasps; a vellum MS. of Thomas of Ferrara, of 1452, with a brilliant illumination showing the author presenting his book to the Duke of Ferrara; a copy of the Evangelists that belonged to Francis II., of the Sforza family; a grammar written for Maximilian Sforza, with his portrait by Leonardo da Vinci, and another of Ludovico il Moro, and an A B C with four large full-sheet illustrations, by Leonardo—all in their original bindings, with the arms and names of the authors. Hung around the room containing all these treasures, were tapestries designed by Bramantino, and paintings and statuettes in bronze and marble. In the next room were two great Canaletti, loaned by Count Alexander Soumani, representing the arrival and the departure of one of his ancestors, as Spanish ambassador at Venice. In another, a twelfth century MS. missal, of the Basilica of S. Ambrose, with an illustration of the coronation of Giovanni Galeazzo Visconti, in an original binding of ivory; and, indeed, a mere transcription of the two hundred and fifty numbers would simply be an additional list of treasures of art and archæology. But the treasures loaned by the liberal Milanese outran even the catalogue. In other rooms were fragments of the monument of Gaston de la Foix, Duke of Nemours, Governor of Lombardy, killed at the battle of Ravenna, in 1512, a famous work by Agostino Busti, collected by the Italian Government, and completed by plaster casts of such of the originals as have been carried off to enrich other museums—some to London, some to Paris, some to Munich—and now first completed by the industry of Pietro Pierrotti, of Milan, an indefatigable worker in such tasks.

Such loan exhibitions are now to be seen in the Kensington Museum, where the enormous extent of the collection defies even the most industrious visitor, and in Berlin, where the Emperor and the Crown Prince, followed by a long list of great names, have turned for relaxation from their triumphs of war to the more

peaceful pursuits of peace. In Munich, the last king, Maximilian II., brought together from the length and breadth of his kingdom, everything that could illustrate the rise and fall of art, adding to its other merits that of being a contemporaneous history. In Nuremburg, the German Museum, admirably housed in an old convent, whose cloisters and cells supply capital space for separate periods, is one of the products of a new growth of the modern German Empire. All of these collections have a distinctive merit, in that they give a local history of art and archæology ; while the Royal collections, such as those of Dresden in the Green Vault, are merely outgrowths of the wasteful extravagance of a succession of kings, whose wealth encouraged false art and left a treasure of useless articles to excite the astonishment, rather than the admiration, of the modern visitors, who find no instruction in them.

The consolidation of the petty States of Italy into one kingdom has been followed by a great development of the collections that illustrate its history. Thus in Venice, the records of the republic, from the seventh to the nineteenth century, have been brought together from the ends of Italy, so that a convent with six hundred rooms barely suffices to give quarters to a collection of original material that supplies the history of the republic and of almost every citizen in it. All of these are now put before the public with the greatest liberality, every convenience is supplied for its free use, and a school of clerks and transcribers is in training to furnish extracts and copies for any person whose studies may lead him in that direction. Alongside of this merely historical side, there is growing up in Italy a national development of the education of the people that cannot but produce good fruit. In the great Council Hall of Venice, which was once used for the popular government that made it great, there was gathered, not long since, a Congress, or as we should call it, a Convention of Teachers, from all parts of Italy, so that the republic of letters saw itself fairly inaugurated in the old home of a republic which did little for the instruction of its people, and so dugged its own grave.

THE MONTH.

THE outcome of the Old Catholic Congress can hardly be satisfactory to those who hoped to see the movement take a thoroughly conservative position, rejecting merely the parts of the Roman discipline that have been so often assailed as abuses by Catholic divines of unquestioned orthodoxy. It was hoped by many that Dollinger and his friends would end in taking up a position similar to that of the Anglo-Catholics in the Church of England, and we think that this was Dollinger's own purpose. The man is no iconoclast as is shown by his attitude toward Prof. Frohschammer, of Munich, and his telegram sent to the Pope some years ago from the Congress of Catholic scholars, in which he pledged the Catholic science of Germany to take the place of handmaid to the church and the Papal see. But with every successive session of the recent Congress, the movement passed more and more out of the hands of Dollinger and those who agreed with him; more and more into the hands of such men as Prof. J. Huber, who, years ago, in his *Johannes Scotus Erigena* transformed the doctrines of the church into a system of pantheism. There is a law of mechanics, that in any body in revolution the influence that any particle exerts is in direct ratio to its distance from the centre of revolution. This principle finds abundant analogies in social movements of a revolutionary type, and only the presence and the mastery of a single clear head and strong will, such as those of Luther or Calvin, or Elizabeth or Cromwell, prevents the movement from shooting far beyond its ideal goal. If the Old Catholic movement have any such mind in its ranks, it is certainly not Dollinger's, but more probably that of Freiderich. We predict that the movement will end in bringing its adherents into closer union with the Evangelical or Lutheran Church of Germany, rather than with any Anglican party. From that quarter come all the impulses that have led the German Catholics to bolder and more thorough research in all departments of study; the men from whom their distinctive intellectual life has received its most vivifying impulses have not been the Fathers of the Church, nor the *Scriptores Ecclesiastici* of the Middle Ages, but the great philosophers and philosophic theologians of Northern Germany.

Any one that is familiar with the writings of Hermes, Gunther, Staudenmaier, Bader, Mohler even, and the other founders of liberal schools in the Catholic Church of Germany, knows how much these men were influenced by their Protestant co-temporaries. A natural affinity, of which the recent Congress gives abundant evidence, will draw them in that direction, as surely as a like affinity carried Ronge and his "German Catholic" party over to the side of the Rationalistic Protestants. Orthodox Lutheranism of the high church type will be the gainer by the whole movement.

THE other European Congress—that of the three Emperors—seems to have resulted in the formation of a second (or shall we say third) Holy Alliance for the preservation of order in Europe. So much is inferred from the terms in which the Russian ambassador has spoken to M. Thiers, warning him that if M. Gambetta make France a focus of revolution, it would be necessary for external powers "to smother the flames." It is an auspicious time for a revival of the old compact of crowned heads, and the socialist and similar movements offer some excuse for it, but it will not be for long. The scene of European conflict will soon be transferred from the boundary line between the Celtic and Germanic to that between the Germanic and Slavonic races. That Bismarck has just sent his right-hand man, Herr von Keudell, as minister to Constantinople, indicates the certainty that the political waters in Eastern Europe are not to stagnate. That he has done so in the interests of Russia is an absurd hypothesis, though not without supporters.

THE new buildings of the University of Pennsylvania were formally dedicated to their new uses, October 11th. We shall not anticipate the full official report of the proceedings, which the Trustees intend to publish, nor have we much to add to the very full details already printed in the daily newspapers. But we may say that, while the edifice is perfect in its adaptation to its great purpose, it is also one of the finest pieces of architecture in our whole city, if not the very finest in its general effect. The exquisite blending of colors adds very greatly to its beauty. Its

only rival on our continent is the grand University building at Toronto, a city that, in respect to its architectural beauty, stands the foremost in America. We rank Cincinnati as second.

On the day following the formal dedication, when the building was still open to the public, the University sustained one of the severest losses that could possibly have befallen it. Professor John F. Frazer, the oldest member of the faculty, fell senseless to the floor at about a quarter to three o'clock, as he was entering his laboratory in the new building. He seemed to be in his usual health just before the event, and had been with his family. But for some years he had been subject to a disease that interfered with the action of the heart, and in more than one instance had supposed himself dying. A member of the senior class ran to his assistance on the present occasion, and raised him from the floor; he was still breathing but unconscious, and in a few minutes every vestige of life was gone. On the following Tuesday he was followed to his last earthly resting place, in Laurel Hill Cemetery, by a large cortege, including members of his family, the friends of his boyhood and his riper years, the Trustees of the University and the members of the Faculties of Arts and of Science. The students of the two departments accompanied the funeral on foot for the greater part of the distance.

Professor Frazer was a man of the finest culture, the most polished social manners, and the warmest devotion to truth. Few men equalled him in the range of his acquirements. His knowledge of science was so complete and thorough, that, had he devoted himself to literary labors or appeared as a public lecturer, he would have had a reputation second to none in America. But he, in great measure, sacrificed such aims to his work as a professor, and worked as hard and as thoroughly on a lecture for a crowd of inappreciative sophomores, as if they had been an applauding "Academy of the Sciences." But he was no mere scientist. Few men were more at home in classic and modern literature; few were such keen and delicate critics of music; few were better able to shine in any social circle. Even in out-of-the-way paths of study he was often at home. He could relish St. Augustine or Francis de Sales as keenly as Browning or

Darwin. His lectures showed the wide range of this curious reading, though in many cases one short sentence summed up the results of a long dive into some long-forgotten and ponderous author.

He was especially at home in the history of science, and loved to trace every idea or discovery back to its first author. He was a fanatic for truth and righteousness in this work, and spared no pains to tear way undeserved laurels and give obscure and unjustly treated men their due honor. Without much taste for history in the ordinary sense (though he had a wonderful knowledge of the literature of memoirs), he grasped the sciences always in their vast historical development, and was thus enabled to impart a living interest to the driest topics. His grasp of memory was prodigious, but was surpassed in wonderfulness by the electric swiftness of his intellectual movement, and the wonderful reach of his mental constructive power. He could read a book and get at the pith of it, before another man would be through the preface. He could take some wonderful "new invention" to pieces at a glance, and expose its false pretensions and its real dangers. Underlying all these powers, was the most thorough early training that he could possibly have received. His had been "the old education;" in the family of the late Rev. Dr. S. B. Wylie, and in company with his sons, he had been drilled in the classics and the mathematics, in a style unknown to these degenerate and superficial days. The attachments formed in that circle clung to him throughout life; by a thousand subtle indications he showed his affectionate reverence for his old and good friend, and for Mrs. Wylie, for whom he had almost a filial regard.

Such intellectual power and insight as his, must at deepest have had a moral basis. While his keen Socratic irony, which he especially brought to bear upon those whom he regarded as insincere, repelled some and created mis-impressions, yet no one could know him closely or hear him in his more serious moments, without perceiving that there was in this man all that makes the essential difference between a good man and a bad one. He was not the man to wear his religion on his sleeve, especially in times when it paid to do so; but when he spoke of these subjects to those that knew him well, it was with a serious reverence and an evident religious feeling that revealed his deeper thought. Throughout

his later years he was most exact and punctual in his discharge of many religious duties, but something of his Friendly ancestors seemed to cling to him, and to manifest itself in a dislike of formality and pretension, which deepened into hatred of shams. In him his pupils had the example of a spotless life, a high sense of personal honor, and an unbounded devotion to the truth.

They know how hard it will be to fill the place his death has left empty ; to find one so well fitted to fill a larger place in the public eye, and yet so ready to devote all his strength to the duties of the lesser sphere.

NEW BOOKS.

KRITISCHE GESCHICHTE DER NATIONAL ÖKONOMIE UND DES SOCIALISMUS (Critical History of National Economy and of Socialism) Von Dr. E. Dühring. Berlin. Th. Grieben, 1872.

This stout octavo volume of over three hundred pages, fills a very important place for the student of social science. In few branches of knowledge is the historical development of greater interest and importance ; but if we except Mr Stephen Colwell's *Introduction* to the English translation of List's *National System*, we have upon the subject in our language, almost nothing that attempts historic continuity and completeness. Dr. Dühring is no novice in this field of study, as his recent treatises go to show, viz : *Carey's Umwälzung des Volkswirtschaftslehre und Societwissenschaft, zwölf Briefe* (Carey's Revolution of Political Economy and Social Science. Twelve letters ;) *Capital und Arbeit, neue Antworten auf alte Fragen* (Capital and Labor, new Answers to old Questions.) *Kritische Grundlegung des Volkswirtschaftslehre*, (Critical Basis of Political Economy, in two vols.) *Der Verkleinere Carey's und die Krisis der Nationalökonomie, Sechzehn Briefe*, (The Depreciators of Carey and the Crisis of National Economy, Sixteen letters), all published since 1865.

He says of his new book : "There is still a want in not only German, but also in French and English literature, of a work that shall present the history of National Economy and of Socialism, including the newest appearances in each department. Even the older and now obsolete works on the subject, which (like the almost single and only *History of Political Economy* by Blanqui, that we still sometimes consult,) were published some thirty years ago, were not up to the times when first published. The chief contents of them might have very well been written as much as fifty or sixty years previously. What they did offer us in regard to the authors and theories of later years, was confined to mere book notices and the external History of the literature of National Economy. A proper history of the economical doctrines therefore remains to be written, and the presentation of that history here offered to the public is based

upon the most direct and thorough examination of the original authorities. That there is united with this a closer history of Socialism, is not only timely but accords with the fundamental thought of the newer historical way of regarding the two provinces, by which they are considered as merely two branches of one and the same stem. There has been no lack in French literature of separate presentations of the phenomena of Socialism for about thirty years past, *i. e.* since the first appearance of Reybaud's *Reformateurs Contemporains*, and in Germany, too, this book has been followed and in part copied for twenty years past in the special presentation of French Socialism. Reybaud's work itself, even apart from its one sided hostile attitude as toward modern ideas of society, accomplished very little toward a comprehension of the deeper traits of its subject, and even in its later editions the fault was not amended. Here, too, therefore, entirely new researches were necessary if one would bring to light the better and more interesting thoughts of the older Socialists, and clear their personalities from thoroughly perverted impressions as to their actual character and importance. Here for the first time, for instance, is traced the need of studying Comte if one would understand St. Simon, and the fact that Fourier must be treated as writers on medical psychology have already indicated and attempted. The later and the latest types of Socialism and their best known representatives, Louis Blanc, Proudhon, Lasalle, etc., have been treated critically and with regard to the inner connections of their doctrines, while all the points characteristic of opinions and persons have been included.

"Still more than is the case with Socialism, there is a need of an independent, complete presentation of the representatives of the later steps in the development of Political Economy. Longer sections are devoted to German and American Economists, and especially to the systems and persons that have only our own days begun to play a more distinguished part. We need only mention such a series of names as Thünen, List, Carey, Bastiat, Mill, Macleod, not one of whom but has been subjected to an examination that extends to the closest details, with a view to giving due prominence to the most modern theories. But the first beginnings of the science are not left undetermined. Petty, Locke, Boisguillibert, Vauban, etc., are among the earliest writers on the subject, and they have been completely described. David Hume and his relation to Adam Smith—a fact of great importance for the later Political Economy—is carefully characterized."

So far Dr. Duhring. We add the table of contents.

"Section I. The Period before Scientific Treatises (The Ancients; Colbert and Mercantilism; Petty, Locke, Boisguillibert, Vauban, Law.)

"Section II. Physiocratists and Scottish beginnings. (Quesnay, Turgot, Hume.)

"Section III. Theoretical System of Industry. (Adam Smith, J. B. Say.)

"Section IV. The Malthus-Ricardo doctrines.

"Section V. The Older Socialism. (Its first beginnings. Babeuf, St. Simon, August Comte, Fourier, Owen and Enfantenism.)

"Section VI. German National Economy. (Thünen, List, etc.)

"Section VII. American National Economy and its relation to European

views. (First steps of its development, the system of Carey; counter views in Europe: Bastiat, Macleod, Mill and Cobden.)

"Section VIII. Later Socialism. (Louis Blanc, Proudhon, Marx, Marlo, Lasalle.)

"Conclusion. National Economy and Socialism in their antagonistic aims and efforts."

It is to be hoped that some competent person will give us a translation of Dühring's work, with such supplementary discussions and notes as would have occurred to Dr. Dühring, had he written in England or America instead of Germany. Mr. Colwell's library, now in possession of the University, would furnish ample literary material for the purpose, and the Messrs. Scribner might very well include the volume in the *Philosophical and Theological Library* which they have begun with Ueberweg's *History of Philosophy*.

R. E. T.

A WAITING RACE. By Edmund Yates. New York: D. Appleton & Co. 1872.

The re-publication of this work, by Appleton & Co., calls vividly to mind the *Decrescit cundo*, at one time occasionally applicable, but now seemingly universal as the motto of the modern novelist.

With "A Terrible Temptation" before his eyes as the last fruit of the genius that had produced "Peg Woffington" and "The Cloister and the Hearth," one could hardly expect a deviation from the rule on the part of a "lesser luminary," as Mr. Yates so modestly termed himself at his late reception in New York; and it is only natural though none the less to be regretted, that the crude strength of "Broken to Harness," should decline into the inanity of this last novel.

Heaviness without weight, harshness without satire, impropriety without spice and dullness without relief, are the salient characteristics of "A Waiting Race." A book whose aim seems to be the inculcation of false views of society might be injurious, were it not for the fortunate fact that its circulation is likely to be confined to that unhappy class on whose part the perusal of such works is a duty.

FIRE SURVEYS. By E. M. Shaw. London: Effingham Wilson.

Captain Shaw (of the London Fire Brigade), is thoroughly qualified to write on the subject of buildings in relation to fires. Every line of this little book has importance; there is not an unnecessary word in it, for it is written with a brevity that is almost military, as if the book was intended for the use of the brigade which the author commands. Few books lately published are more useful or deserving of a wider circulation. There is a great deal of vagueness at present among the public, with regard to what is and what is not a fire-proof building. *The London Architect*, says that the Building Acts have tended to promote this ignorance in England, and certainly our own Building Acts are begotten in and produce ignorance upon the fire-proof question, as well as upon all other building questions. With us Building Acts appear to be framed solely for the benefit of bonus house-builders, and in portions display a lamentable ignorance of well known and universally accepted laws of construction. A state

of circumstances can hardly be imagined in which it is not possible for a building to be more or less injured by fire. To be truly fire-proof, according to Captain Shaw, a building should be divided into compartments, and so constructed that the contents of any one compartment might be consumed by fire without calcining, melting, or otherwise destroying the surrounding horizontal partitions, and, therefore, without communicating fire to the other rooms or floors. Of course, in many instances, such an arrangement is impracticable, as it would often ruin utterly the most beautiful and important features of a building, and would very much increase the cost. The projecting woodwork of a roof is likely to take fire from the windows below, and in this city where houses are generally built in long rows, with the roofs of the same height, these cornices are exceedingly dangerous, conducting the fire with great rapidity from one house to the entire row. Thirty years ago these cornices were built of brick—which is not only a safer material but makes of the cornice a finer architectural feature. There is no stone which sooner or later will not yield to heat, but as long as the world lasts, stone, if it can be found, will form the chief material for buildings. Forty feet from the ground, according to Captain Shaw, is the greatest height at which assistance can be readily given to inmates by firemen; and sixty feet is the greatest height which can be protected, but, notwithstanding this, buildings of greater height must be erected. In fact there is no material which we can employ, that has not some risk in its use. Captain Shaw says that no structure can be properly called fire-proof, if the ultimate strength of it depends on any metal; and this is especially true of cast-iron. At a temperature of 212° Fahrenheit, or the boiling point of water, it loses about fifteen per cent of strength; at 612° or the temperature of molten lead, it probably has no strength; and at 2,787°, which is likely to be below the temperature of the center of a large building on fire, cast-iron melts. There is, therefore, danger in the use of columns of this material, but especially so when they form the main support of corner-buildings. In this latter case, Captain Shaw would make it compulsory to have, instead, on the outer angle, either good walls, brick columns, or strong hard wood story posts of oak and elm. To some extent iron columns, and other things as well, are protected by having a coating of plaster. Instead of employing iron in the floors of buildings, Captain Shaw would use it rather in the roofs. He recommends as a roof which would have many advantages, one of corrugated iron, with sliding windows, which could be easily opened to let the smoke and heat arise, and which would give facilities to the firemen to get at their work inside. The trusses he would have of lattice girders, plated over and passing through the roof, thus to form party or fire walls. The openings of internal divisions, he says, should be fitted with single or double wrought-iron doors, with stiffeners in the form of ribs, rails or bars, and the supports for these doors, should be of wrought-iron or steel, and not more distant from each other than two feet. Some of the most disastrous fires were extended from the warping or buckling of iron doors from want of proper supports. Revolving iron shutters often form substitutes for these doors, and have advantages from their lightness and compactness. But

in all cases where iron, whether wrought or cast, is employed, allowance should be made for the elasticity and for the expansion and contraction from changes of temperature. There is no material which is considered by Captain Shaw so unsuited for resisting fire as stone. Sometimes it calcines, or will so crumble as not to be able to bear a load; besides it cracks and splits in a fire, adnin falling is most dangerous. He does not tell us whether he found any difference between a sandstone, a granite and a limestone. Where stone has been found to resist fire for some time, he attributes it rather to the mortar or cement. Stone is found to be especially dangerous when used for internal work, such as corbels, landings, or staircases. If there must be staircases, he would have the core or frame of wrought-iron, and the stone only employed as a covering. For external work it sometimes answers, but never s) well as brick. In order, he says, to ensure a high degree of safety, walls should be constructed of well-burned bricks, or of some other substance which cannot be affected by fire, such as concrete composed of ashes, slag, or other materials which have been previously burned. He regards a mud wall favorably; but unless it is formed of great thickness it gets out of shape, if there is not a frame imbedded in it, and this latter becomes in itself a source of weakness from the difference of expansion between the materials of the frame and covering. A building on fire, practically, is subject to a variety of strains arising from the expansion of materials, from falling bodies, etc., and hence is the necessity of a thorough system of bonding. A wall of hard bricks laid in good mortar or cement is no doubt very sound, but even such a wall, Captain Shaw says, is likely to fall, on an emergency, if not firmly bonded into a cross wall, and enormous loss has been occasioned by the absence of this bonding. He suggests, that instead of buttresses, tie rods, etc., walls should be secured by constructing them in a zig-zag form, with a strong bond at the angles. Front, back and side walls, he says, should be properly tied in or bonded to each other, and this would prevent what is very common after fires, viz. : the parting of front and side walls. External walls should be firmly tied to party and return walls, by strong wrought-iron anchors, of strength and number sufficient to keep the whole outside of the building firmly fixed without the assistance of floors, roofs, or internal ties of any kind, and walls should under no circumstances be tied together by the floors or roofs, so that if floors are burned it may not affect them. Cornices should be firmly hung on, or secured by iron anchors, each of good length. Bond timber in walls is dangerous and should not be allowed; hoop-iron forms a much better bond. The effects of a fire reach to the foundations, as at such a time unequal settlements arise, and what the firemen call the "tumbling about" of walls arises mainly from the want of a proper foundation. From Captain Shaw's experience he places great reliance on walls built on inverted arches, having under them either firm ground, concrete, or a solid substructure. So much does he think of good foundations that he considers it would be an advantage if there was a law that no building should be erected within fifty feet of another except by a skilled architect, who would be responsible for the strength of all the parts; or at least that no building of forty or fifty feet in

height should be erected without a certificate from an architect or surveyor, testifying to the sufficiency of the foundations.

We have quoted sufficiently from Captain Shaw's book to show its thoroughly practical character and excellence, and we cannot but hope that some of his many valuable suggestions may be heeded and made use of by our own reckless and ignorant builders.

The book can be ordered of Mr. John Penington & Son, 127 South 7th St.

THE PENNSYLVANIA PILGRIM and other Poems. By John Greenleaf Whittier, [pp. 129, illustrated.] Boston: James R. Osgood & Co., Philadelphia: Porter & Coates.

Our readers are aware that this magazine, almost alone among our periodicals, has acted on the conviction that our local history of the city and the state was worthy of literary treatment, and really possessed in many respects a wide and lasting interest. Mr. Longfellow has shown what could be done, in the conclusion of *Evangeline*, to glorify and transform our every-day matters with the touch of poetic *glamour*. Mr. Whittier, another New Englander, has taken up the papers of Dr. Seidensticker on Francis Daniel Pastorius, published in our issues for January and February of this year, and those on "The German Mystics as American Colonists," that appeared at an earlier date, and constructed on this basis a poem of great literary beauty, and, also, of the keenest local interest. While readers in all parts of the land will be delighted with the book, the residents of Germantown, the descendants of its first settlers, and even all who take an interest in the history of the Society of Friends, and its opposition to slavery, will read the book with unusual interest and pleasure.

The poem has all the usual characteristic marks of Mr. Whittier's work, except that its form does not bring into play his highest poetic power. Mr. Whittier is, above all things, a lyric poet, the greatest in America. He can tell a story well, but he must interfuse it with his own fire in telling. When his characters speak, they all talk Whittier; he has no dramatic gift, no power to construct another man's thoughts from within, and from a starting point different from his own. As a lyricist, he has a trick that is superbly illustrated in Macaulay's *Lays of Ancient Rome* and his other historical poems. He touches a vast area on its highest peaks of interest, briefly characterizing place after place in a way that excites the imagination of the reader, and makes him wonder how much is left untold. Macaulay's "Horatius" sweeps over all Northern Italy in this way; his "Armada" does the same for England. He even uses the method in prose, as in describing William's visit to the English shires during a parliamentary recess. So Whittier weaves into his sketch of Pastorius name after name of his contemporaries, giving the readers just such an impression as a brief glimpse of a miniature would. The whole atmosphere of the book is wholesome and refreshing, as is everything that its author has written. It has the dewy fragrance of a First Day morning walk among the flowers.

Passing from the literary to the historical aspect of the book, while we are not dissatisfied with it, yet we have somewhat against it. The impression it gives of the social surroundings of Pastorius is not true to the life. The hard-

hips, the pinched life, the unceasing struggle with nature that fell to the lot of the first settler, are all put out of sight. Everything is as smooth and nice as if the scene were laid one hundred and fifty years later. The Friends are all of the modern type in essential respects, although the outward characteristics of the first and intolerant generations are preserved. The words that we had quoted from Kelpius might have supplied another side to the picture, viz.: Primitive Quakerism took rank among the most exclusive of the sects. Again (p. 26), Spener and Eleonora Von Merlau are brought into close proximity as co-workers in the religious field. They stood about as near to each other as Richard Baxter and George Fox. They are, indeed, both historically associated with Pastorius. It was Spener's influence that made him a Pietist before he became a Quaker. The Peterson and Von Merlau circle were engaged in the support of the Frankfort Company. But their sympathies were more with Kelpius and Falkner, dreaming and waiting on the hills above the Wissahickon, than with Pastorius and the Quakers and Mennonites who built Germantown. It is, again, (p. 31) somewhat premature to represent Pastorius' house as a station for the underground railroad, and to represent a lawyer trained in German courts as acting *in civil matters* on the maxims of the higher law. The epithet "familist" applied to the Labadist Sluyter (p. 35), is historically incorrect. Schurmberg is described (p. 41) as a student of the Vedas, a century before any European scholar was aware of their existence, which reminds one of Thoreau's complaint that people went to church to read the Bible, instead of staying at home to read the Vedas, there being at that time no English translation of them. Grotius (p. 43) is made into an ordinary authority for civil and criminal law.

But these slight blemishes are less culpable in the poet than they would be in the historian, and, as Pennsylvanians, we take the whole book, with thanks to its author.

THE POET AT THE BREAKFAST TABLE: His Talks with his Fellow-Boarders and the Reader. [Pp. 418. Price, \$2.] Boston: J. R. Osgood & Co. Philadelphia: Porter & Coates.

The American Montaigne becomes more truly a Montaigne as he mellows with years. "The Autocrat" was hardly a fitting title for one of his easy and tolerant class. Even "The Professor" had a flavor of autocracy and dictation in it. But "The Poet" is a title after Le Sieur Michel's own heart. The new book is of much the same materials as the old ones, and therefore almost incapable of any general description, because of the great variety of its contents. It abounds in the same half-cynical, yet humorous, analyses of character—the same odd scraps of curious scientific and historical fact—the same graphic sketches of after-dinner philosophy—the same long, but not inapposite, digressions—the same flashes of grave and gay poetry intermingled with the prose. Of course, it contains numerous glances at the problem that has so largely occupied its author in later years—the reaction of matter upon spirit, and the difficulty of drawing any clear, distinct line between the two spheres. Those who judge a work by comparing separate passages in it with those in some other, will think it inferior to its predecessors. It has nothing equal to the "One-Hoss Shay,"

and the wit of its prose mostly lacks the spiteful keenness of the *Autocrat*. They will say that the book illustrates the boyish by-word: "You can't do it again." For our part, we are too Montaignist to stoop to such impertinent comparisons. It is folly to spoil one's taste for a book by applying a test that the best dinner will not stand. We take it thankfully, just as it is, with all its own excellencies; a fresh and true addition to the great class of literature that lies far away from the busy and contentious interests of the race, that one can read without effort and digest without bile. Yet we must say that here and there are places that detract from our enjoyment of it as a book of this class. There are bits that Holmes the Unitarian, or Holmes the hemi-semi-demi-materialist, wrote, where Holmes the humorist would have handled the pen better. But still, the places in the book that remind us that the author—unlike Montaigne, Lamb, and the rest of the brotherhood—is a busy public man in his generation, are but few.

BOOKS RECEIVED.

The Dove in the Eagle's Nest; by the author of the Heir of Red clyffe New York, D. Appleton & Co., 1872. For sale by Porter & Coates.

The Prairie; a Tale by J. Fenimore Cooper, New York, D. Appleton & Co., 1872. For sale by Porter & Coates. Price 75 cents.

Gavroche the Gamin of Paris; From "Les Miserables" of Victor Hugo: Translated and adapted by M. C. Pyle, Philadelphia. Porter & Coates, No. 822 Chestnut street.

The Forms of Water in Clouds and Rivers, Ice and Glaciers; by John Tyndall, LL. D., F. R. S., New York, D. Appleton & Co., 1872. For sale by Porter & Coates. Price \$1.50.

Art Education, Scholastic and Industrial; by Walter Smith, State Director of Art Education, Massachusetts. Boston: James R. Osgood & Company, 1872. For sale by J. B. Lippincott & Co.

Hints on Household Taste in Furniture, Upholstery, and other details; by Charles L. Eastlake, F. R. I. B. A.; edited, with notes, by Charles C. Perkins, M. A. Boston: James R. Osgood & Company, 1872. For sale by J. B. Lippincott & Co.

Domesticated Trout; How to Breed and Grow Them; by Livingston Stone, A. M. Boston: James R. Osgood & Company, 1872. For sale by J. B. Lippincott & Co.

Report of the Commissioner for the Restoration of the Inland Fisheries for the year 1871; including his Special Report to the Senate on the subject of Fish Ladders. Harrisburg: B. Singerly, State Printer, 1872. From John Pennington & Son, 127 South 7th Street.

THE
PENN MONTHLY.

DECEMBER, 1872.

JACOB BARKER.

JACOB BARKER was born on Swan Island, Kennebec, then the Province, and now the State of Maine, on the 17th of December, 1779, during a temporary residence of his parents, but claimed the little Island of Nantucket, lying off the coast of New England, as the place of his nativity, although only brought up there. Jacob Barker and Benjamin Franklin descended from the same ancestral stock ; Jacob Barker being third cousin in the paternal, and fourth cousin in the maternal, line, to Benjamin Franklin. There was a striking personal resemblance between these two very remarkable men ; nor were they unlike in their prominent traits of character. Both have made their mark in history. The former, by his genius and labors, illuminated the world of science, and led in the counsels of statesmen and diplomats ; the latter won great distinction as a leader in mercantile and financial affairs, and played an important part in the politics of his country. The mothers of both were born in Nantucket. The childhood of Mr. Barker was spent in his island home, where he early caught the inspiration of the sea. Nor is it strange that in his boyish ambition, he should choose the sea as the theater on which to try his fortune in life. There, in his boyish sports, he showed his undaunted spirit, as he would launch his boat upon the waves, and play with danger as if enamored of its perils—fit emblem and foreshadowing of the fearless and indomitable courage which

characterized his conduct through a long and stormy life of unrest, amid the conflicts and competitions of business and public affairs. His disposition and aptitude for trading and mercantile pursuits displayed themselves at a remarkably early period of his life. While quite a boy, he would send little sums of money by the captain of his brother's packet, to Boston, to purchase something for the Nantucket market, which he would sell on his own account on the return of the packet. His brother James allowed him, on several occasions, to go as cabin-boy in his packet to Boston and New York.

At the age of sixteen he left Nantucket to enter school in New Bedford. It was then he first met Miss Hazzard, who afterward became his wife. He remained at school only about a year, and then served, for a short time, as a clerk in a country store. But his aims were higher; yielding to his early predilections, and stirred by his youthful ambition, he determined at once to enter upon the life of a sailor, and shipped as a raw hand on board a packet bound for New York, with the understanding that he might be discharged at that place, could he procure a berth on board a ship bound for the East Indies.

On his arrival in New York, he was induced, by his brother Abraham, to abandon his sea-faring schemes, and enter the counting-house of Isaac Hicks, a commission merchant of high standing. At this time his capital consisted of one hundred dollars in money, the result of his trafficking in Nantucket, together with investments already made in absent adventures, which yielded another hundred. So, at the age of seventeen, with two hundred dollars in his pocket, and a position in one of the first mercantile houses in New York, Jacob Barker began the real business of life. He devoted himself with fidelity to the service of Mr. Hicks, but neglected no opportunity for indulging his early-formed habit of trading on his own account. He was sent to Nantucket, by several prominent merchants in New York, to purchase ships for them. He went twice to the island on this errand and bought three ships. The transactions were in the highest degree creditable to the young agent, and evinced a maturity of judgment, a readiness to comprehend emergencies, and a quickness and energy in executing his plans that were astonishing in one of his age.

For these services, his employer received a commission on the

whole amount of the purchase-money of two and a half per cent. During his minority he not only traded with foreign countries, but also became part owner in there ships and a brig, and kept an account with the United States Branch Bank.

In these simple facts we reach the comprehensive commentary on the character of his boyhood. There were no fortuitous chances, and unreflected and thoughtless adventures that worked this result, but an abiding self-reliance, restless activity, and well-considered plans. The value of the property was not so much in its possession, as in the self-training and discipline resulting from the efforts put forth to realize it, fitting him for the sterner struggles of manhood.

In 1801, Mr. Barker commenced business on his own account as a commission merchant. On the 27th of August of the same year, he was married to his former school-mate Elizabeth Hazzard, daughter of Thomas Hazzard, of New Bedford. They lived together sixty years, until she died, in the year 1861. They had a large family; eight sons and four daughters; six of whom are now living. While at his wedding dinner a letter was handed to him, which informed him of the loss of all his property, in consequence of having endorsed and sold bills of exchange for an Irish merchant, one Henry Delaves, who was one of the wedding party, and to whom Mr. Barker after reading it handed the letter. He also read it, and then at the invitation of Mr. Barker, took wine with him. The rest of the party were ignorant of the contents of the letter. Neither the equanimity of Mr. Barker nor the joyfulness of the occasion were disturbed by the unexpected intelligence, and full of confidence and hope, he bore his young wife to his home in New York. The dishonored bills were paid, but in so doing Mr. Barker lost all of his earnings up to that time. He continued his business, which soon became very extensive; but he soon was dissatisfied with commission business, as he believed in the great future of the country, in the increase of commerce both internal and foreign, and therefore he embarked also in maritime trade. Directing his energies to this new field of enterprise, his ships soon began to float on every sea. With Russia he opened a large trade. He established a house in Liverpool. He continued his maritime operations till he became the largest ship-owner in the country, with the exception of Mr. William Gray,

of Boston. While he extended his operations all over the world, he never forgot his native place, and was always ready to extend any aid within his power.

In 1825, the merchants and banks of Nantucket became embarrassed; they applied to him, and through his agency procured a loan of three hundred thousand dollars, on a pledge of oil to be left on the island. He also first supplied the island with steam communication with the mainland, by furnishing the steamer *Marco Bozzaris*. He mediated between the merchants of Nantucket and New Bedford, and urged co-operation upon them, and thereby restored confidence in the oil market, and brought wealth to both places. He supplied the Government for seven years with all the oil used in the light-houses of the United States.

In 1806, Mr. Barker imported on consignment to himself by a London house, for account of Robert Fulton, the first steam-engine ever used in the propulsion of vessels. Mr. Barker had the good fortune to have the services of the poet Fitz Green Halleck, for nearly twenty years, as his confidential clerk, and there always existed between them a warm love, and ardent friendship. Jacob Little was also in his employ. Mr. Barker was early led to study the laws and principles of trades, in their more comprehensive relation to the science of political economy, to trace the connections between the policy of government, and the resulting conditions of commerce and finance. He felt the need of encouraging home manufactures, and aiding internal commerce, to insure true liberty and independence. This feeling, together with his warm patriotism, led him early to take an active part in politics, into which he carried all the zeal of his earnest and restless nature. He was born a Democrat, and he lived a Democrat. He espoused the cause of Thomas Jefferson; he defended the Embargo and Non-importation Acts; he advocated the purchase of Louisiana; he opposed war with Great Britain in 1812, but when actual war came, the war policy of Mr. Madison was supported by him.

All were detrimental to his private interests, and tended to the ruin of his prosperity. When Madison became President, the embargo had been repealed, and non-intercourse with Great Britain and her colonies substituted, but proving ineffectual as a protection to our mercantile marine, and maritime rights, both parties aroused to a sense of the national honor—the Federalists

insisting on a war with France, the Democrats, with Jacob Barker as a leader, as earnestly opposing it. The latter maintained that France was powerless to do us harm, and that Great Britain was our most formidable foe. De Witt Clinton and Jacob Barker spoke on opposite sides in New York. De Witt Clinton was supported by the Federalists, as candidate for the Presidency, and President Madison by the Democrats. The Democracy prevailed, and Madison recommended a declaration of war against Great Britain, preceded by an embargo, enacted to be in force for ninety days.

On information from England, foreshadowing the speedy rescinding of the Order in Council, Mr. Barker drew up a memorial to Congress, signed by men of all shades of political opinion, headed by John Jacob Astor, asking to have the embargo continued and the declaration of war postponed.

This memorial was presented to the Senate, only the day before the declaration of war, and was therefore ineffectual, the war party being unable to recede from their position. The Orders in Council were rescinded twenty-one days after, and before the news of war had reached England, thus establishing the power of the restrictive measures.

Mr. Barker believed that the declaration of war had put in requisition the services of every American citizen, and that each should do the work for which he was best fitted. The declaration of war having taken place, the leaders of the Federal party hoped to obtain possession of the reins of government, by depriving the administration of the means of carrying it on. Large amounts of money were necessary to equip armies, and to build navies. There was at that time no elastic issue of legal tender notes to meet the wants of the war and navy departments—to keep the money market easy and prevent financial distress. The sole dependence then was on the people; the banks and moneyed institutions of the country being in the hands of the Federalists.

On the 8th of October, 1813, Congress passed an act authorizing the borrowing of sixteen millions of dollars. For this loan the public were invited to send in proposals to the Treasury Department. This appeal proved a most lamentable failure, only about four millions of dollars having been offered; it seemed as though the Government must yield for want of support, and the

nation bow to Great Britain. These circumstances induced Mr. Barker to undertake the raising of money for the use of the Government. He accordingly opened a subscription book, and with great exertion succeeded in procuring subscriptions to the amount of two millions four hundred thousand dollars. A large proportion of the subscribers were Federalists. Mr. Barker did not stop here, but proceeded to obtain additional subscriptions, and to make such arrangements as enabled him to furnish five millions of dollars. Rejoicing in his success, and justly proud of his ability to replenish an exhausted treasury, he went to Washington to make the offer. On the day of his arrival at that place Mr. Alexander C. Hanson, a member of Congress from Pennsylvania, delivered a very violent speech, in which he stated that the Government was destitute of funds, and unable to borrow a single million in all America; that the merchants would refuse to make further advances, and that the administration had already obtained the last dollar in the power of its friends to furnish. He said that his information was derived from the best informed merchants in the country, and that he could not be mistaken.

An alarm of that nature generally prevailed. Congress itself appeared dejected at the gloomy prospect which was presented.

In the evening, Mr. Barker had an interview with Mr. Calhoun and others, and disclosed to them the object of his visit to Washington.

On the next day, Mr. Bidd, a member of the Committee of Ways and Means, replied to Mr. Hanson, and informed Congress that Jacob Barker had proved the willingness of the people to sustain the administration. His statement gave great satisfaction to the Democratic members, and filled the opposition with astonishment and alarm. The subscription had been made in so quiet a way, that the existence of such a fund was unknown in Congress.

Mr. Barker at once offered to the Secretary of the Treasury, Mr. Sheldon, a loan of five millions of dollars, on the same terms as Government had allowed for the sixteen million loan, instead of exacting better terms, which could have been obtained.

The Secretary replied, that, inasmuch as no law authorizing a loan had as yet passed, he could not give a decisive answer.

On the 2d of August, 1813, a law was passed authorizing a loan

of seven millions and a half of dollars. The whole loan was taken in a few days.

Shortly after this loan was closed, money became more scarce and the wants of Government seemed to increase. Mr. Barker, in his desire to render efficient aid, called a meeting of his friends to consult for the purpose of devising some plan that would give the necessary relief. He proposed the establishment of a National Bank, and his proposition was coincided in and confirmed by his friends. He accordingly prepared a petition to Congress for such an institution. Copies of the petition were sent to the principal cities, but it was only acted upon in Philadelphia and New York.

Mr. Barker went to Washington in January, 1814, and remained there until after Congress adjourned, endeavoring to convince the members of both houses that, without the establishment of a National Bank, the Government would be unable to obtain the money necessary for war purposes. The measure, however, failed, nearly all the Federalist members opposing it.

On the 24th of March, Congress passed a law authorizing the President to borrow twenty-five millions of dollars. It was advertised for, to be closed on the 2d of May. The Secretary of the Treasury invited proposals for ten millions of dollars; a greater sum was wanted, but he was afraid to offer more at one time. Mr. Barker offered to take five millions of dollars of this loan. After much negotiation with E. W. Campbell, Secretary of the Treasury, he agreed on the 2d of May, 1814, to take the amount named.

No man of that day worked so hard to preserve the credit and honor of the country. Had the promised conditions of the loan been fulfilled, Jacob Barker would have been able to furnish the means for the entire conduct of the war, so complete were his arrangements with the banks.

Charles J. Ingersoll, in speaking of Mr. Barker, said that he thought the aid given to the Government by him during the war of 1812 was quite as important as that of Mr. Morris during the war of the Revolution.

In the autumn of 1814, Mr. Barker again urged the establishment of a National Bank, and at last was supported by the President and Cabinet; all had become convinced that there was no alternative but to do it. Previous to leaving New York, he ob-

tained, to a petition to Congress for the establishment of such a bank, the names of many of the most respectable and wealthy citizens, of both political parties, and forwarded it to Washington; it was presented to Congress and referred to the Committee of Ways and Means. Before Mr. Barker reached Washington, Mr. Campbell, Secretary of the Treasury, resigned his portfolio, and in a few days Alexander J. Dallas, of Philadelphia, was appointed in his place.

Mr. Dallas entered on his duties as Secretary on the 13th of October, 1814, fully impressed that a National Bank was a necessity. On the 15th of October, Mr. Barker submitted his plan to Mr. Dallas. Mr. Dallas soon recommended the establishment of a National Bank at Philadelphia, and a bill to that effect was offered in Congress, but not acted upon until the next session of Congress, and until after peace was proclaimed. In the late war, those who furnished aid to the Government in the hour of need, were helped by united public opinion, by the wealth of the nation, by well-developed systems of banking, and by the issue of a large irredeemable currency. They were honored as patriots, and justly so; but what praise is due to him who, when money was scarce, banks few, opposition strong, enemies bitter, gave, of his own means, and by the most persevering efforts induced others to take the loan, and when, too, but for the money furnished by him, the war must have flagged, and England have been triumphant.

Mr. Barker was in Washington at the time of the battle of Bladensburg, when the British army was advancing on the capital. At the request of Mrs. Madison, he and Robert J. L. Depeyster took from the White House the only original full-length portrait of Washington, by Stuart, and carried it to a place of safety.

Mr. Barker lost most of his vessels during the war, namely: the "Rodman," the "Dolphin," the "Catharine Jane," the "Joseph Reiketsen," the "Champlain," the "Eliza Ann," the "Leander," the "Juno," the "Driade," the "Jasin" and the "Lady Madison." There was no insurance either on the vessels or on the cargoes.

At the close of the war Mr. Barker resumed his commercial business both at New York and at Liverpool, and established a bank in New York, became a candidate and was elected a mem-

ber of the New York Senate. While a member of the Senate he was also a member of the Court of Errors. He differed in opinion with Chancellor Kent in an insurance case; the chancellor contended that if the master of a ship intended to deviate from the voyage, as stated in the policy, the insurance was forfeited; and Mr. Barker, that forfeiture should only follow upon actual deviation. The court sustained the opinion of Mr. Barker by a vote of fifteen to eight. Since that time this decision has been a law on this subject in England, France and America.

He advocated, while in the Senate, the building of the Erie canal. He was a warm friend of De Witt Clinton, and an early supporter of General Jackson—in fact, he first nominated him for the Presidency.

In the year 1834, Mr. Barker went to New Orleans to look after some mortgages on Louisiana plantations, and was so impressed with the prosperity of that city, that he moved his family there from New York. He made it his home until the year 1869, when he came to Philadelphia where he resided two years and a half with his son. He died on the 26th of December 1871.

On the question of slavery Mr. Barker, inherited the opinions and feelings of the Quakers, from whom he sprung, and, although a resident of New Orleans, he never hesitated to express himself freely on the subject. He sent several colored boys to Europe to be educated, believing that the difference in the races was attributable more to their education and habits than to other causes. He was not, however, successful in his choice. There never was any doubt in his mind that slavery was contrary to that great principle which teaches us to do unto others as we would they should do to us. He was elected to Congress in 1865, but was never permitted to take his seat. As a type and representative of a class which has sprung from the bosom of our great commercial communities, those who, while they determine and control the operations of trade and finance, at the same time make themselves felt in the affairs of Government and politics, as well as the general progress of society, Jacob Barker never had his equal in America.

Unselfish and self-reliant, he often suffered loss and defeat of his plans by a too hasty expression of his convictions. His quickness of perception and soundness of judgment, combined with impatience and impulsiveness of character, caused him to rely too

much upon his own powers, and too often to disregard the power of co-operation. But it was this very independence, clearness of judgment, and evident sincerity and unselfishness, which give his opinions so much weight with such men as Madison, Hamilton and Clinton. His mental powers were backed up by the highest physical courage, a quality really essential to true greatness. He was also possessed of a strength of constitution which gave him vast power of endurance. Jacob Barker was born in the State of Maine on the 17th of December 1779, and died in Philadelphia on the 26th of December 1871, and consequently had lived more than ninety-two years.

THE KING AND THE PROFESSORS.

THE wail followed close upon the jubilee at the University of Gottingen, in the year of our Lord 1837. On the 17th, 18th and 19th days of September, the centennial anniversary of the University's birth threw the quiet old town into a flutter of festive excitement. Men of prodigious reputation, hailing from all parts of Germany, jostled against each other in the streets; on a single stroll, a lucky fellow might have caught a glimpse of Humboldt, Thiersch, Welker, Gesenius, Lachmann, Ritschl, Julius Muller, Wegscheider, Wachsmuth and Hurter, the latter in knee-breeches, silk-hose and silver-buckled shoes. All these, and many others of equal renown, had come to offer their birthday greetings to the famous *Georgia Augusta*. Massmann sent from Munich his congratulations in Gothic, winding up with the *Gaudeamus igitur* in that long defunct idiom. Many were the incidents of those memorable days. Gieseler, the well-known church historian, spoke at the unveiling of William the Fourth's statue. Ottfried Muller, the admired author of the "*Dorians*" and the "*Archæology of Art*," delivered the inaugural at the new University building. Called out by an enthusiastic crowd (men of hoary heads vying with freshmen in lusty vivats), Humboldt held forth from the balcony of Dietrich's publishing house. The famous naturalist was now a man of 66 years, but young compared with his old teacher Blumenbach, whom he was delighted to embrace once more. Blumenbach,

the Nestor of science, so well known through his division of the human family in five races, had been professor at Gottingen since more than half a century, and could tell of the University's 50th anniversary in 1787, in which he had taken part.

The most popular feature of the celebration was the grand procession of professors, students and alumni, gaudy with banners, badges and floral display. The students, divided in columns of *corps* and *landmannschaften*, sported (by special indulgence) on caps and sashes the colors of their semi-secret organizations. None of them was more conspicuous than the South Carolinian Grant, who, as the solitary representative of the great republic of the West, proudly bore the Star Spangled Banner, that had never before waved in the streets of Gottingen. And while the learned masters of science—Humboldt, Gans, Weber, Blumenbach, etc., discussed at the solemn meeting of the Academy of Science the great problems of nature, the students, joined by many alumni ("Old Boys" and "Mossy Heads"), repaired to their favorite haunts—Rhons' Hill, Sehlen's Garden, the "*Kaiser*" and the *Universitat's Kneipe*, plunging into boisterous mirth, rending the air with "*Landesvater*" and "*Gaudeamus*," pledging to each other at the joyous wassail faithful brotherhood and eternal friendship.

It was a jubilee, a three days' outburst of solemn, sentimental and frolicsome exultation. And still there was a dark cloud lurking on the horizon that excited concern. Among the many distinguished guests that had accepted the invitation to the centennial celebration, there was one, in rank the most exalted, who has not been mentioned yet, viz.: his Majesty, King Ernestus Augustus, who three months before had assumed the reins of government in Hanover. It was he whom many people eyed with nervous anxiety, while the deferential honors, to which his position entitled him, were freely bestowed.

Ernestus Augustus is well known to all readers of English history as the Duke of Cumberland, a son of George III. and brother of George IV. and William IV. He was identified with the High Tory Church and party, took an active part in the opposition to Catholic emancipation, and was, as Grand Master of the Orange lodges, feared as a schemer who might, at the head of that powerful organization, grasp at the throne of England.

Against the alarming spread of Orange lodges in the army, with the connivance of this ambitious Grand Master, who was also Field Marshal in the army, the lower house of Parliament arrayed itself by an energetic address to the crown, in which the Duke's name was expressly inserted.* He was bitterly hated by the liberal party, and atrocious stories concerning his profligacy and crimes found ready credence. His unpopularity in England became so great that he expatriated himself to Berlin, a place he found the more congenial, as his wife was Queen Louise's sister. Upon the death of his brother, William IV. (June 20th, 1837), the connection of England and Hanover, under the same crown, which had continued since the elevation of George I., in 1714, was severed. Victoria, the daughter of the Duke of Kent, became Queen of England; and Hanover, where no woman can rule, fell to the Duke of Cumberland as the lawful successor. The people of that kingdom were on the whole well pleased with the change thus brought about. It was to them a satisfaction to have again a king to themselves, one residing in their own country. While under George I., who preferred Hanover and Herrenhausen to London and Windsor, they might have looked upon the British Empire as a gigantic province annexed to little Hanover, this agreeable delusion had long vanished under the law of political gravitation, and the old Welfic patrimony had become a mere appendage to the larger kingdom. Now, Hanover had again a home king. But alas! the first words he spoke to his subjects betokened no good. A manifesto of July 5th, in which Ernestus officially announced his accession to the government, contained the declaration that the king did not consider the constitution then in force as binding on him. The legislature, which was in session, was dissolved. Anxiety and distrust fell like a blight upon the fresh blossoms of hope and joy. Would the king dare, upon his own responsibility, to set aside the fundamental law of the land, the Constitution of 1833, which had been framed by a properly chosen assembly, sanctioned by the late king's approval, sworn to by all public functionaries? As yet, it stood, though slurred by the royal proclamation. As time wore on, and the alarming manifesto was not followed up by any act consummating the threatened *coup d'état*, the hope gained ground that the

*See THE PENN MONTHLY for September, 1870. Article: Orange and Green.

king, after a sober second thought, would bow to the supremacy of law, and accept, as a new sovereign is bound to do, the *status quo* of his predecessor.

It was during this suspense between reviving confidence and lurking anxiety that the great centennial jubilee of Gottingen occurred, and it will now be understood why the royal guest awakened uneasy thoughts, as if he were a storm-king, brewing mischief.

Another month passed without change in the situation. It was now generally believed that the trouble had blown over and that the country would remain at peace with its sovereign.

This hope was soon blasted. On the 1st of November the blow was struck. The king declared, by a new manifesto, the constitution of 1833 invalid, annulled, void and of no effect. The law of 1819, with its aristocratic features, which had been superseded by that of 1833, was by a stroke of pen re-established. No act ever was more emphatically the assertion of the divine right of kings to do as they please; no proceeding ever declared so unequivocally that subjects have no rights which a king is bound to respect. To insist, as Ernestus did, that the constitution had no legal validity, was one of those cloaking phrases that always adorn despotic edicts. He never proposed to test the question of validity. It was not brought before legislature or court. The king raised it, constituted himself the competent forum and decided it. *Sic volo, sic jubeo.*

We shall not follow up the history of this conflict—in which might triumphed over right—except so far as the University of Gottingen became involved in it. German universities are not merely establishments where young men are instructed in certain things. They are the centres of thought and intense intellectual life, the perennial springs of civilizing ideas, the gathering places of the nation's rising hope.

Among the professors there are found the most prominent men of the times, men of solid learning, calm judgment and unwavering principles. While keeping aloof from partisan warfare, they do not remain indifferent to questions that affect the honor and welfare of the country. "The frank and uncorrupted mind of youth demands," says Jacob Grimm, "that the professor should apply to all questions on important matters of life and state the

highest moral standard, and answer them with honest truth." It was thus that the king's overthrow of the constitution became a concern of the University. And not only morally and inferentially did the issue present itself to the professors, but also directly and personally, inasmuch as all professors had, as servants of the State, taken the oath to the constitution. True, Ernestus Augustus did not fail to grant a general release from these oaths, but the right to wipe out oaths was not less questionable than that of expunging a constitution.

When the king's bold determination to ride rough shod over law and constitution became known in university circles, it was generally denounced as a direct attack upon the most sacred rights of the citizens, as the bad act of a bad man. But when the question came up what course the university should pursue, the counsels were anything but in unison. Many of the most prominent members felt that silence would be a crime. Should they, the foremost in science and learning, lay themselves open to the taunt that book lore had blunted their conscience, that a great emergency had found them cold and torpid, that their country's throes could elicit from them no other answer than: "*Ne turba meos circulos!*" Others, however, pleaded the inexpediency of action; the older professors wanted no disturbance; some, who had at first taken strong ground, had their resolution shaken by fear of consequences. When it came to the signing of names to a respectfully worded protest against the king's unjustifiable breach of law, only seven remained that did not flinch, and their memory will be honored as long as manliness is counted a virtue.

The seven protesting professors were:

1. W. E. Albrecht (born 1800, still living), professor of jurisprudence, author of valuable works on German law.
2. F. G. Dahlmann (1785—1860), professor of political science, author of many historical works (*Sources of German History, English Revolution, French Revolution, History of Denmark*) and the "*Politics based on Positive Facts.*"
3. G. H. A. Ewald (born 1800, still living), professor of Oriental languages and literature, author of a renowned work on Hebrew grammar, of the *History of Israel*, and exegetical commentaries on the Old and New Testaments.
4. G. G. Gervinus (1805—1870), professor of history, best

known through his exhaustive *History of German Literature*, his work on Shakespeare, and the *History of the Nineteenth Century*.

5. Jacob Grimm (1785—1863), author of numerous works on the Teutonic languages, literature, traditions, laws, antiquities, etc., probably the most learned man of his age.

6. W. Grimm (1786—1859), brother of Jacob, and his faithful co-laborer.

7. W. E. Weber (born 1804, still living), professor of physics, famous for his investigations and writings on undulation, terrestrial magnetism, and electro-dynamics.

These were the seven who, in a time of political gloom and faintheartedness, dared to stand up against the anger of a law-defying king. Six more illustrious men, Ottfried Muller, Karl Theodore Kraut, Heinrich Ritter (author of the *History of Philosophy*), Th. E. von Leutsch, and F. G. Schneidewin (the last two distinguished in classical philology), soon afterward endorsed by a public declaration the course taken by their colleagues.

The protest, which from its very nature was not a secret or confidential transaction, became known to a number of friends by manuscript copies, and, of course, soon found its way into public prints. Its effect on all minds not bred or tutored to slavish subserviency was electric. The word spoken was an event. The darker the times were, the brighter shone this remonstrance against high-handed usurpation. No hamlet in Germany where it was not heard of. The "seven," for the nonce, meant not the seven wise men of Greece, but the seven professors of Gottingen.

Let us now see what the king did. The professors had questioned his right to absolve them of oaths sworn in support of the constitution. Natural enough that he should dislike men of so inconvenient a conscience—that he should take umbrage at their openly expressed dissent. Did he then treat their paper with contempt? Did he administer to them a rebuke? Did he enter complaint against them before the University tribunal? Did he invoke a court of justice? Nothing of all this. On the 11th of December a royal decree summarily dismissed the seven professors, and enjoined on three of them (Dahlmann, Jacob Grimm and Gervinus) to leave the land within three days, on penalty of imprisonment.

Thus did the first Welfic king of Hanover treat the University,

which his ancestor, George II., had established one hundred years before, and which the succeeding kings of England had always kindly nurtured.

There is often in bold acts of tyranny something that captivates the fancy, and may mislead judgment. Think of the 18th of Brumaire. But the brutal "*quos ego*" of Ernestus lacked even this adventitious luster. For the purpose of isolating in some measure the seven recalcitrant professors, of having them, to all appearances, disavowed by their colleagues and the University, the king descended to a course of artful cunning, which was, to say the least, disingenuous and trickish.

Towards the end of November, while his wrath against the offenders was yet held in abeyance, the academical senate of the University was informed by the Prorector Bergmann that the king, during his stay at Rothenkirchen, about twenty or twenty-five miles from Gottingen, expected a complimentary visit from a committee of the University. There was no official letter on which this communication was based, and no official action was taken. By general consent, however, the prorector, the deans, and some ex-deans of the several faculties were charged to pay their respects to his majesty. This deputation, joined by some members of the city government, set out in happy unconcern upon their errand to Rothenkirchen on the last day of November. On their arrival they were asked whether they brought an address from the University. They had neither an address, nor instructions what to do and what to say. Jacob Grimm very justly remarks, that their proper course would then have been to withdraw; for their reception was coupled with a condition they were not in a state to fulfill. However, pressure was applied by artful courtiers, and Professor Bergmann worded a sort of non-committal address, full of pleasant phrases of devotion and the like. The paper was taken to the king's room, and returned as not acceptable, because it contained no clause in condemnation of the protest. That was the very thing expected. The prorector and the rest of the delegation now felt themselves entangled in the insidious meshes, but lacked strength of character to break loose from the snare. So they set again to tinkering, and produced another address, which, though it shirked the question at issue, contained, as a sop to Cerberus, remarks reflecting on the indiscreet publica-

tion of the seven professors' protest. Its vague and tortuous phraseology may have allowed a somewhat wider construction to be placed on it. At the same time Mr. Ebel, the mayor of Göttingen, a crawling sycophant, undertook to declare in the name of the citizens that they discountenanced the professors' disloyal behavior, and were, in fact, only too happy

—“to kiss the rod

And fawn on rage with base humility.”

The king, who readily saw that with a little diplomacy he could now make himself master of the situation, accepted the new version of the address and granted the audience.

The brow-beaten delegates then went home again, carefully guarding their mouths about what had happened. They probably thought the matter would rest there. But to their utter dismay the *Gazette of Hanover*, the official paper, in its issue of December 6th brought the announcement that the University, through its prorektor and deans, had repudiated the action of the seven professors, and had declared their unbounded confidence in the counsels of his majesty. About a week later came the dismissal of the seven.

Thus Ernestus had cleverly played the game of *parcere subjectis et debellare superbos*. The poor doughfaces hid their faces in shame, not daring to give the official paper the lie, and the proscribed professors shook the dust from their feet, bidding farewell to the University that had derived luster from their names. The students could not be restrained from showing their sympathy, and six other professors, as we have seen, expressed publicly their approval of the protest. These Ernestus left unharmed, though consistency in his savage warfare should have led to their expulsion also. But he forbore; one more shock might have brought down the whole University in hopeless ruins.

While King Ernestus expressed his indifference at the loss of so distinguished men by a cynical remark too coarse to be repeated here, other universities were glad enough to gather and enshrine these precious waifs. And so we find, after a while, Ewald installed in Tübingen, Gervinus in Heidelberg, Albrecht and Weber in Leipzig, Dahlmann in Bonn, and the two Grimms in Berlin. The University of Göttingen felt the loss of her prominent men severely in the diminished number of students, the fall amounting to about 25 per cent.

Here our account of the "King and the Professors" might close; but history has furnished an epilogue, or rather two, which should be noticed as strikingly confirming the world's ancient faith in a Nemesis. Two remarkable events overtook the Welfic house of Hanover ere the generation had passed away that had witnessed the contumely offered to the country's *Alma Mater*.

The year 1848 blanched many a royal cheek. The angry roar of revolution, started at Paris, swept whirlwind-like over the continent of Europe, and unstrung the sinews of the proudest monarchs. Barricades carried the day against bayonets. The people demanded, the kings obeyed. Ernestus Augustus, now a tottering old man of 77 years, was caught by that tempest. In Hanover, also, rights too long withheld were reclaimed by the people with angry determination: liberty of the press, trial by jury, extension of suffrage, right of association, responsibility of the ministers. They also insisted on full amnesty for political offenses.* In vain did Ernestus try to gain time by pleading sickness and by vague promises. On the 16th of March a turbulent multitude, headed by intelligent leaders, filled the area before the king's palace, and insisted on unconditional consent to their demands. It was through the mouth of Baron Munchhausen, whose name, of course, suggested cheap pleasantry, that King Ernestus signified his acceptance of the people's programme. And thus ended the king's meddling with constitutional guarantees. Well might he yield. Had his heart been too stubborn, a look upon his only son, the blind Crown-prince George, must have

*In 1831 a protest against the unpopular ministry of Count Munster had been backed by insurrectionary movements in several cities of Hanover. The whole disturbance came to an end in a week's time, no blood being spilled, no property taken or destroyed. The leaders, who were captured, it was concluded to make an example of, and outrageous sentences were imposed by a pliant judiciary. The terms of solitary confinement reached in two cases the duration of life. When Ernestus became king, it was hoped he would grant an amnesty, but he doled out his pardons ungenerously and with restrictions. One of those State prisoners, standing very near to the writer, was actually imprisoned 15 years, and then pardoned with exile. The people did not forget in 1848 the men of 1831, and demanded that they should be reinstated in their former positions. The king complied.

made him anxious to assuage the angry waves before the hand of his blind successor had to grasp the helm.

Gottingen, too, was visited in 1848 with unwonted excitement. Some students who, flushed with enthusiasm and wine, had, on the evening of the 11th of March, lustily cheered for liberty and progress, were brutally assaulted and wounded by the armed police. The united students now demanded reparation of some kind, and when this was not granted, they collected on the 18th at the open square, took there an affectionate farewell from the professors, and, as the town-clock struck twelve, left the city in a body. But the advancing tide of revolution soon effected such a change in the condition of things that they received all the satisfaction they desired, and returned. Nor was this all. On the 20th of March the city and the university united in a petition to the government for the recall of the expelled professors, and, in consequence, two of the victims of 1837, Weber and Ewald, were, some time after, reinstalled in their chairs, which they occupy to the present day.

And now for the second epilogue. Eighteen years had passed since the turbulent times of 1848, when new tempests arose, this time from a different quarter. Austria and Prussia stood arrayed against each other at the dreadful summons of domestic war. George I., the blind son of Ernestus, now king of Hanover, cast his lot with Austria. In June, 1866, Gottingen was thrown into a greater excitement than in 1837 and 1848. Every house was quartered with soldiers, all villages in the neighborhood were turned into military camps. The king, who at the approach of General Falkenstein to Hanover had fled from his capital with his hastily equipped army, arrived in Gottingen on the 17th of June, signaling his advent with a pathetic proclamation. On the 21st he moved on to effect a junction with the Hessians and Bavarians, while Vogel von Falkenstein, military governor of Hanover, entered and took possession in the name of William, King of Prussia. The Hanoverian army in its south-easterly march met and defeated, on the 27th, a detachment of Prussians. It was a barren victory, or rather one fraught with disaster to the conquerors, for it ended the still open chances for a compromise. The reinforcements, which the Prussians received the next day, sealed the fate of Hanover. The army capitulated to superior

forces; the king fled, never to return to his ancestral dominions. Thus the Welfic dynasty lost the last throne it occupied in Germany, where it once filled history with its renown. The same name which heads the English line of Welfic kings closes the series of rulers in Hanover—George I., now a friendless exile in Hietzing near Vienna.

OSWALD SEIDENSTICKER.

SONNET.

When those celestial eyes first turned on mine,
 Bearing the message heaven sent through thee,
 When, later on, those sweetest lips of thine
 Breathed forth thy holy love bestowed on me,
 And, mirrored in thy soul so pure and deep,
 My sins did of a darker dye appear,
 I felt that I, 'mid all my joy, could weep
 To see my image near those waters clear.
 But, since our souls each unto each have grown,
 My happiness I hold without alloy,
 Knowing that, worthless save in this alone,
 I yet have added to thy life the joy,
 To thee and ministering angels giv'n,
 Of guiding a poor, erring soul to heaven.

E. C. W.

THE SERVICE OF SONG.

CHURCH-BOOK for the use of Evangelical Lutheran congregations. By authority of the General Council of the Evangelical Lutheran Church in America. Philadelphia. Lutheran Book Store, 117 North Sixth st. *The same work*, with music, arranged for the use of congregations, by Harriet Reynolds Krauth. Published with the recommendation of the General Council, XVI, and 469. 8 vo. Same Publishers.

THE "churchly revival" that has been going on for the last forty years in England and Germany has imparted a very marked impulse to liturgic and hymnologic science, if it may not be said to have created these within the bounds of the Protestant Church. In Germany the abominable falsification of the old Church hymns, against which Herder lifted up his voice in indignant protest, was carried on from the middle of last century at such a rate that at last hardly a single old Lutheran song of

praise was "in print" in the shape in which it came from its author's hands. The simple, straightforward speech in which the Reformers' and later singers had embodied the fact of their personal communion with God, were superseded in their perversions and in the new hymns of Gellert, Klopstock and their school by terms borrowed from the moralists; they spoke of *virtue*, not *grace*, of *reform*, but not *regeneration*. A wholesome reaction set in with the German Christian party after the war of Liberation. The old hymn-books were hunted out in the libraries, and their contents made the basis of new collections, while the rhymed harangues of the critical period were allowed to relapse into oblivion. The old church *Agenda* were made the basis of new liturgic forms. The choral and liturgic music of the great masters from Walther to Sebastian Bach was called out of its silence to be heard again in the churches. Such books as Albert Knapp's *Liederschatz*, Bunsen's *Essay Toward a General Hymn and Prayer-book*, and Layritz's *Kern des Deutschen Kirchenlieds* and *Kirchengesangs* were signs of a new era. The matter was taken up with German thoroughness and treated by some ideally, *i. e.*, with reference to what ought to be the contents of a hymn and prayer-book for the German Church; by others practically, in that they printed works designed to occupy that place; by others historically, as they surveyed the whole field of the past, and reviewed the vast wealth of material which makes the Evangelical Church of Germany the richest of all the Protestant churches in this department.

In England the Oxford movement of 1830-45, which has so mightily affected all English-speaking sects and churches, began its career with two hymn-books, and by the stress that it laid upon public worship gave men's thoughts an impulse in this direction. Hence the great revival of public interest and the wide dissemination of knowledge in regard to it. The previous hymn books had for their staple either Tate & Brady or Watts' psalms and hymns, both prosaic affairs, and far inferior to much that lay neglected in the older hymnology, to say nothing of the vigor and fire of Charles Wesley and other poets of the Methodist movement, whose hymns were left in possession of a single sect. The new reform has brought forward to light much that was old and native—Ken, Mason, Wither, etc.; but it has added more that

was new and much that was foreign. It had no such accumulated wealth of the past to fall back upon as the Germans had, and therefore it was, on one side, forced to larger originality than has characterized modern Germany. In spite of such names as Spitta, Ruckert, Knapp, Meinhold, etc., the Evangelical Church places her golden age of hymnology in the sixteenth and seventeenth centuries. The English golden age, in our opinion, began with Heber, Keble, Lyte, Montgomery, Newman, Caswall, and their compeers, and has not yet ceased, nor even culminated.

One evidence of this originality is in the large appropriation and assimilation of foreign material—a saying that is no longer paradoxical, since the critics have set down immense powers of plagiary among the evidences of true genius. Our new hymn writers have ransacked the Greek and Latin singers of the earlier and later Church, and reproduced their masterpieces in vigorous and devout versions. They have even gone into such out of the way regions as Spain, Italy, Russia, Sweden and Denmark, and have not come back empty-handed. But on the richest hymnology of all—that of Germany—they have drawn heavily and most successfully. Not that they were the first English visitors in that quarter. In the era of the Reformation, when the intercourse with Germany was quite close, Coverdale, in England, and the brothers Wedderburn, of Dundee, in Scotland, translated Lutheran hymns in considerable numbers. The versions made by the former were republished some years ago by the Parker Society as original compositions, and Rev. Professor Krauth, of this city, was perhaps the first to point out the mistake. Those that the Wedderburns made in Scotch were widely disseminated, and used by the first Scottish Protestants in that strange collection, *The Gude and Godlie Ballads*, which has recently been republished, and it is not uninteresting to see how Luther was made to speak “the Doric.”

The rise of Moravianism and of Methodism again brought the religious mind of Germany and England into contact, and a very considerable number of translations were published by J. C. Jacobi, in 1722, and others later by John Wesley. These latter were from the hymns of the subjective or pietistic school, which arose about the close of the seventeenth century—not from the old churchly hymns of the period that extended from Luther to Paul

Gerhardt. They were long believed by devout Methodists to be Wesley's own composition, but their authorship is fully identified in recent editions.

We shall take the risk of giving offense on both sides in ascribing the third rise of interest in German hymnology to the Oxford movement. It was, indeed, one of the Oxford men's principles to disown all connection and refuse all sympathy with continental Protestants, as being little or no better than English dissenters. Most of the recent translators—Miss Winkworth, Miss Cox, Mr. Massie, Mr. Kelley, Mr. Macdonald, Miss Borthwick, Mr. Reynolds, and our own Dr. J. W. Alexander—we believe to be out of sympathy with that party. But the impulse given by the Tractarian leaders to the religious cultivation of the beautiful, cannot be limited by party lines and formulas. It has extended to all religious parties, and has especially shown itself in the warmer and deeper appreciation of true poetry in the form of hymns and liturgies.

To the Lutheran Church in America, and especially to the branch of it represented by the General Council, we might very properly look for a church-book which should embody in the English language the results of the recent wide study of the subject in both countries. This denomination may fairly be regarded as occupying a mediate position between the Christendom of Germany and that of America. To the former it is bound by all the ties of the past, to the latter by all the affiliations that grow out of the circumstances of the present. Its conservative position toward the theology and the formularies of the Lutheran Reformation bring it into close sympathy, and often into actual contact, with the great mass of German Christians, while the scholarly catholicity of its leading minds, and the high standing accorded to them by American Christians, keep them and their Church in warm and friendly relations to the Christian public at large.

It is, we believe, largely to the fine taste and careful judgment of Dr. Seiss that the General Council owes its church-book, which is at once a liturgy and a hymnal. In both departments of the work the compilers have had before them a very large range of material, and have not hesitated to take anything that suited their purpose. They have freely drawn upon the forms of prayer and praise that originated in England at the time of the

Reformation, or were translated into English at that period, forms which we are accustomed, very improperly, to regard as the property of the Episcopal body. Other forms are drawn from the various liturgies of the primitive and of the German churches, and from the devotional parts of the Scriptures. Features that excited especial dissatisfaction with the English liturgy—the long exhortation to confession, the recurrence of the Lord's Prayer, the use of the Athanasian Creed, the exclusion of free prayer, etc., are excluded by a stricter following of primitive models. In some places it might have been worth while to depart a little from the old English translation, for the sake of following the original more closely; does the *exercitus candidatus* of the *Te Deum*, for instance, not admit of a closer and more beautiful rendering than "Noble Army?"

In passing to the hymnal, we find traces of the current revolution on almost every page. Time was when Watts was the rule and anything else was the exception. Even our churches of German ancestry, if we may judge from some books that we have seen, were no exceptions. Let us analyze the present book. Of its 588 hymns, 167 are translations, 11 being from the Greek, 42 from the Latin, 110 from the German, 2 from the Italian and one from the Danish. Of its original English hymns, 18 represent the period before the revolution of 1688, all of them excellent; but there should have been more of them. The period between the English and the American revolutions is represented by 201 hymns, of which about one-third are by Watts, and another third by Charles Wesley. The period between that and the beginning of the Oxford movement by 99 hymns; 1830–1872, by 76 English and 19 American. [If we are not mistaken Watts only secures his present large representation in this and similar hymnals by his past prestige. Could anything else secure the insertion of such a spiritual grumble as his hymn to the Holy Spirit (No. 253)? A similar reason, we presume, secured its place to Cowper's utterly Moravian piece: "There is a fountain" (No. 159). Compilers must sometimes do what they may, not what they would.] The Lutherans of the General Council may be congratulated on possessing in their church-book a hymnal whose only American rival in Catholicity of range and general excellence is the *Songs of the Church* of the [Dutch] Reformed Church. We miss, indeed, some

of our German favorites; we think that room might have been found for all of Luther's marvelous hymns; and for that of Ruckert: *Dein König Kommt in niedern hüllen* (translated by E. S. Porter), which Kurtz says stands alone in reproducing in our age the spirit of the first age of Lutheran hymnology. In the English selection we think the old Psalm-book of the Reformation (largely common to England and Scotland), has been unduly slighted; at the very least its massive versions of the hundredth Psalm ("All People that on Earth do Dwell,"—the real "Old Hundredth" by John Kethe), and of part of the eighteenth Psalm ("The Lord descended from above," by Sternhold) deserve insertion in every English hymnal.

The musical edition of the Church-book, prepared by Miss Krauth, comes forward in a year that will be memorable in the history of church music in America, because of the numerous editions of the new Episcopal *Hymnal*. Our impression is that her work aims at a higher standard of excellence than does any other book of the year. She has had before her a far larger collection of material that she might *freely* draw upon, in the great army of German chorals; she has been under no necessity of competing with musical rivals by adapting her book to tastes that are popular and no more, both because hers is an official edition and because it is composed for a public with whom good music is a tradition.

In the arrangement of the Liturgy for choral service she has aimed at preparing a book for congregational use, the choir being merely the leader of the *gemeinde* in the true Lutheran idea. Perhaps the greater part of the music is of English origin, selected from the vast repositories of chants that have accumulated in the Anglican Church. A very large number, however, are from German sources, and are eminently worthy of the attention of choirs of the sister Church. In the Hymnal at least half the tunes are German, the proper tune of the original hymn being given with every translation where it is at all possible to do so. In Layritz's *Kern des Deutschen Kirchengesangs*, and Miss Winkworth's *Chorale Book for England*, have been chiefly employed for this purpose. This combination of English and German church music produces something altogether different from any other book previously published in this country, although the resulting whole

is quite in harmony with itself. Whatever of German music was not suited to the English ear has been carefully excluded on the one hand; on the other, what has been chosen from English sources is of a sort to conform to the German standard of classic excellence. Of course, our more "popular" American composers, Bradbury, Root, Woodbury, make but scant appearance in these pages; Lowell Mason oftener and deservedly so, yet not often. Perhaps it is this canon that has excluded two tunes that we looked for: *Nettleton* or *Fount* is wanting, although its usual hymn, which it far excels in merit, is inserted. "Guide me, O thou great Jehovah," is set to *Alleluia dulce Carmen*, not to the Welsh melody to which William Williams wrote the hymn in Welsh before he translated it into English.

Any omissions of this sort are grandly compensated for by the substituted masterpieces of English and German musicians. Here is music that will not go out of fashion with this year's bonnets, but will wear for centuries to come, and much of which has already sustained the "conflict for existence" for centuries past. It is not indeed in harmony with the prevailing taste; it has not the qualities that commend the airs to which our children sing those soul-stirring popular melodies:

"Oh, glorious hereafter
Whose every bright rafter
Shall shake with the thunders of sanctified song."

"There's a light in the window for you, brother."

"Jesus paid it all."

"Come to Jesus, just now."

"Will you meet us by the river?"

We often wonder what sort of "music of the future" the Sunday-schools are entailing upon the churches, and only find comfort in Baader's maxim that every one-sided movement necessarily brings after it a reaction in the opposite direction. After the Lowries, Fannie Crosbys, Bradburys. What? Not the Bachs, Purcells and Tallises, we fear. They are too broad to be a mere reaction.

"But (it is pleaded) these are the men that have made music popular in America. Your classic music will never get even a hearing, except as the result of their labors." We answer that the one man who did something to make music popular in America was Lowell Mason, of whom we might say as Carlyle

says of Mrs. Heman's poetry: "There was a thin vein of true music in the man." The outcome of his work were the Boston Jubilees, not very grand results, but still something. He had virtually no training for the work of a composer. A clerk in a Georgia store, he became interested in church music by taking charge of the choir in a Presbyterian church; he then set himself to teach his public all he knew, and himself kept learning more—as his public grew—and doing better the greater part of his life. But to the last he suffered from the fact that he had not from the first made music the business of his life.

The men we most complain of had not Mason's excuse. They have devoted their life to music, or rather to making money out of what taste the people have for it; but instead of educating the people to a higher and purer taste they have done all that in them lay to corrupt what the people had, and to make jingle forever popular in America. What they might have done may be seen in the work that Hullah has done in England. "Twenty-five years ago," said the late F. D. Maurice, in 1855, "if half a dozen intelligent people acquainted with the tendencies, the strength, the deficiencies of the English character, had been asked what studies would be the least likely to spread amongst us, especially amongst our manual workers.....there would have been no dispute. They would have said: 'Whatever other instruction you undertake, let the fine arts alone. They belong to the South. They have ripened there under the warm sunshine both of ecclesiastical and State patronage.....Everything in the social condition of our people, in their hard practical temper, in their religious services, is hostile to this sort of cultivation!' And if a reluctant exception were made in favor of drawing, it would only have been that the testimony might be made more strong against the possibility of music ever obtaining the slightest hold upon our people..... Well, of all experiments in English education, beyond comparison the most successful has been that for diffusing a knowledge of music and a love of music among our people.....The classes of Mr. Hullah have brought thousands together of both sexes in London and in every part of England. Every order, down to the lowest, has felt the impulse. I am credibly informed that instead of merely hearing lectures about singing, multitudes have actually learned to sing. I am sure no one can look at their faces, at one of their great

meetings, and not perceive with what hearty delight they exercise their gift.....A craving both for instrumental and vocal music has been awakened among mechanics in London and the provinces.' "

What has been the character of this man's influence, as compared with our Bradburys and their like? It has been thoroughly popular always. What the people like is what he has held fast to, in spite of the contempt of the mere technicalists. Music that does not appeal to the ear of the unlearned, that is not all instinct with melody, he, like the people at large, has no patience with. The mere complex intricacies of an artificial harmony, which only the learned ear can follow and analyze, he declines to admit to anything but the second place in art. But withal he has been the unwearied teacher, never stooping to musical *cookery* (as Socrates would call Bradburyism) to tickle the palate of his public. He has stood up always for technical skill and learning as the indispensable complement of musical genius in the production of works of the finest order. If he has refused to Bach's *Fugues* and *Passion Music* the place claimed for them by the technicalists, he has equally refused to put Beethoven beside Mozart (while admitting him to have been the greater genius of the two), because he was essentially lacking in the musical learning that the great composer can never dispense with. He has thus vindicated his place as the people's teacher by his breadth of view, his ability to comprehend and apprehend the truth underlying opposite views. This has been his influence, not one-sided, narrow and partisan, but at once genial and popular, and tending to promote thoroughness. If we had but one such man in America we might learn from him some reverence for the works of the past—might feel some hope for our future as a musical people. In view of his career let no one plead that our grand masters of jingle are but taking the steps that are absolutely necessary to secure for music a hearing among us. The nation is capable of better things, but they will never lead it one step the higher.

In another point Miss Krauth's work will not suit our present ways and methods, because it calls for something better. It is not a book for choir-singing in any sense, except as the choir may serve simply to lead the congregation. The old Protestant musicians had in their mind the voice of the whole congregation ;

it was for that that they wrote their tunes and chorals. They did so from principle; the Reformation had proclaimed the universal priesthood of all Christians, and therefore all were to join in the praise that was no longer restricted to a choir. Thus at once congregational singing became a solemn sacrament of the new movement. Luther's hymns sped faster and farther than his books, and it was said by his opponents "did more harm." In more than one city, to which no Protestant preacher had ever come, some one clear voice was uplifted in Luther's lyric words in church or market-place, and at the signal thus given, the Reformation began at once. His hymns leaped away beyond Germany, were sung from Montrose to Milan, from Rochelle to Warsaw. But let a quartette choir sing *Ein Feste Burg is unser Gott* to the choral he himself wrote for it, and how poor the effect! Only a multitude of voices can fill up the spaces of its harmony. So of the old music of the Reformed Church; the tunes of Franck and Goudimel, and those adapted from the works of Goudimel's pupil, Palestrina. Nothing but the combined voices of an entire congregation can do justice to such tunes as *Old Hundred*. It was for that that their authors wrote them, and until we do them that measure of justice they will never take hold of us and sing in our memories as with those that first heard them.

The priestly and monkish choirs of the old Church symbolized their theory and rationale of worship; that of the old Protestants equally symbolized theirs. What does our modern fashion of paid and proxy choirs in both churches symbolize, if it be not that we have given up our old difference and agreed to unite in Mammon worship.

HOUSEHOLD TASTE.

TO many people it may seem of little importance what may be the exact curve of the legs of the table off which they eat their dinner, or of the chair upon which they sit, provided these articles of furniture answer their respective uses, but there are others, belonging, it must be confessed, to a limited, but fortunately a growing class, to whom correctness in the construction of even such simple articles of daily use appears to be of importance. For it is just these ordinary things which are daily and hourly before our eyes that exercise the largest influence upon our taste. Those among us who care at all for such things are forced to confess that with us public taste in art is very vitiated, and that our standard is exceedingly low. And this is neither surprising nor disgraceful.

We may possess, by nature, the most critical taste, but it must have material to feed upon, and constant opportunities for exercise, or it will be stunted in its growth. We have no grand museums like the Louvre, Hotel Cluny or South Kensington Museum, where our people can study and enjoy the best productions in every branch of art; we have no great galleries of paintings such as exist in every European capital, where we can train our eye by the study of the works of the old masters. Although as a nation we are supposed to be great travelers, but a fraction of our people see the art-treasures of Europe, and even those of us who are among the more fortunate, are, as a rule, totally unprepared by previous study or observation for intelligent appreciation of them. The houses we live in are almost universally badly built, ugly, inconvenient and unpicturesque, and our furniture and interior decorations are incorrect in construction and vulgar in taste.

We can easily picture to ourselves the typical parlor or drawing-room, such as it was in nine cases out of ten but a few years ago, and such as it still is in too many of our houses.

In our large cities the room is long and narrow; upon its floor is a carpet covered with flowers of the most ill-assorted colors in huge patterns, which still further detracts from the apparent width of the room. Around its ceiling is a stucco border without beauty or design, and its walls are covered with a paper upon which are the feeblest representations of flowers, or else with a mass of white paper with some meaningless splotches of gilt.

A flimsy chandelier of the last pattern, but with nothing but its novelty to recommend it, hangs in the center. Under it is a table with a wooden or marble top, with the legs put on in such a way that they act as but a weak support, or with some scroll saw ornament of the basest sort, working out from the central stem. Placed with great exactness against the wall, around the room, are some chairs that have to be used with care to prevent the shedding of their legs or the breaking of their backs, and one or two stiff hair-cloth sofas. When we add that ugliest and most unmanageable article of furniture, a square or grand piano, and, on the narrow mantel-shelf one or two especially bad vases and bottles, we have completed the list of the most striking articles. In such a room, if there are any books, we may be certain they are over

twenty years old, and that they are carefully placed in four little piles exactly in the middle of the four sides of the table.

Gloom and melancholy brood over the room and throw a chill upon every one who enters it; it looks as if no human being ever crossed its threshold—as if dyspepsia, misery and despair would surely seize upon all who dared to make use of it.

Whilst groaning under this condition of things, we might the more readily bear with it did we find it as the result of pecuniary poverty and not of poverty in taste and in ideas. Within the last few years, however, a quiet revolution has been in progress, and has worked, to a limited extent, a change for the better. The greater revolution in decorative art manufacture in England, which has been brought about by the study of the principles of Gothic architecture and of mediæval art and by the labors of its early disciples, Mr. Rickman, Mr. Blore and Mr. Augustus Welby Pugin, has made itself felt even in our own country. Mr. Rickman distinguished the various styles, and published a number of books to guide students in their researches. Mr. Blore, who is called “one of the most minute and beautiful architectural draughtsmen the world has ever beheld,” erected numerous buildings with correct detail, but it is Mr. A. W. Pugin who deserves the credit of having waked up the English nation by his enunciation of true principles. The Cambridge Camden Society, and many others of a like character, carried the work bravely on. Then came Mr. John Ruskin, whose writings have had such a powerful influence, and who enunciated the great principles of truth, sincerity and honesty in art, which have been universally recognized and accepted. A host of artists and art-writers in England have assisted in bringing about that study of and reverence for art in all its forms which now exists in that country and which has borne such excellent fruit in its application to the various decorative art industries. Under the influence of this movement grew up that marvelous establishment, the South Kensington Museum, which now contains by far the most complete and valuable collection of art objects which has been formed in our day, and which, with its numerous and excellently organized local schools of art scattered throughout the kingdom, has done and is doing incalculable good. Prominent among the art-writers of this nineteenth century revival are Mr. Burges, Mr. George Gilbert Scott, Sir Digby Wyatt, Mr. Talbert, Mr. Edward S. God-

win, Mr. Owen Jones, and last, but by no means least, in the energy with which he has labored and the success which has attended his efforts, Mr. Charles L. Eastlake, the son of the illustrious artist and writer, Sir Charles Eastlake.

Some five years ago Mr. Eastlake published in London his *Hints on Household Taste in Furniture, Upholstery and other Details*," and this was probably the first work in which the subject was treated in a popular manner. It enjoyed an unprecedented success in England, and has just been republished in an excellent form in this country, edited with notes by Mr. Charles C. Perkins.*

Mr. Eastlake says, in his introduction, that it is unfortunate for the interests of art at the present time that in civilized countries it has come to be regarded as the result of theories utterly remote from the question of general taste, totally distinct from those principles which influence manufacture and structural science, and independent of any standard of excellence which we might expect to be derived from common sense. Speaking of the commonplace taste prevalent as to pictorial art, he says that if we are to believe those who have given their attention to the subject of technical design, it pervades and infects the judgment by which we are accustomed to select and approve the objects of every-day use which we see around us. It crosses our path in the Brussels carpet of our drawing rooms; it is about our bed in the shape of gaudy chintz; it compels us to rest on chairs and to sit at tables which are designed in accordance with the worst principles of construction and invested with shapes confessedly unpicturesque. It sends us metal work from Birmingham which is as vulgar in form as it is flimsy in execution. It decorates the finest possible porcelain with the most objectionable character of ornament. It lines our walls with silly representation of vegetable life, or with a mass of uninteresting diaper.†

* *Hints on Household Taste in Furniture, Upholstery, and other Details*, by Charles L. Eastlake, Fellow of the Royal Institute of British Architects. Edited, with notes, by Charles C. Perkins, M. A., Author of *Tuscan Sculptors*. First American, from the Revised London Edition. Boston, James R. Osgood and Company, 1872.

† Mr. Burges in his "Lectures on Art applied to Industry (p 79) says: As far as I have been able to ascertain, the people of the middle ages had a horror of a continuous mass of diaper. It is true they very frequently did make use of diaper, but always as a background to subjects, and in small quantities.

It bids us, in short, furnish our houses after the same fashion as we dress ourselves, and that is with no more sense of real beauty than if art were a dead letter. It is hardly necessary to say that this is not the opinion of the general public. In the eyes of *materfamilias* there is no upholstery which could possibly surpass that which the most fashionable upholsterer supplies. She concludes that the dinner service must be perfect which is described as "quite a novelty." When did people first adopt the monstrous notion that the "last pattern out" must be the best? Is good taste so rapidly progressive that every mug which leaves the potter's hands surpasses in shape the last which he moulded? In that case, how superior our modern crockery would be to that of the middle ages, and mediæval majolica to the vases of ancient Greece! But it is to be feared that, instead of progressing, we have, for some ages at least, gone hopelessly backward in the arts of manufacture. And this is true not only with respect to the character of design, but often in regard to the actual quality of the material employed. It is generally admitted by every housewife who has attained a matronly age that linen, silk, and other articles of textile fabric, though less expensive than formerly, are far inferior to what was made in the days of our grandfathers. Metal workers tell us that it is almost impossible to procure for the purpose of their trade brass such as appears to have been in common use a century ago. Joinery is neither so sound nor so artistic as it was in the early Georgian era. A cheap and easy method of workmanship, an endeavor to produce a show of finish with the least possible labor, and, above all, an unhealthy spirit of competition in regard to price, such as was unknown to previous generations, have combined to deteriorate the value of our ordinary mechanics' work.

National art is not a thing which we may inclose in a gilt frame and hang upon our walls, or which can be locked up in the cabinet of a collector. To be genuine and permanent, it ought to animate with the same spirit the blacksmith's forge and the sculptor's *atelier*, the painter's studio and the haberdasher's shop. In the great ages of art it was so. Francia, a carpenter's son, was brought up as a *niello* engraver. He became a great painter, but he was not for that reason ashamed to work at decorating jewelry. He loved to sign his pictures "Aurifex," and on his trinkets he

inscribed the word "Pictor." The most liberal salary would not now procure such assistance for our jewellers. Modern jewellers, as a rule, know nothing of pictorial art; painters, it is to be feared, have but little taste in jewelry. Every branch of manufacture is inclosed within its own limits, has its own particular style. Our china, which once imitated Oriental ware, not long ago promised to assume, through Minton's influence, a quasi-mediaeval character. English goldsmiths, who once produced nothing but rococo ornaments, now do their best to imitate Etruscan necklaces and armlets. We have French mirrors and Persian rugs, Greek vases and Gothic candlesticks, designs of every age and country but our own; or if by some chance we can point to any special instance of a genuine English design, it is generally mean and uninteresting. It is rather amusing to us in this country to find Mr. Eastlake so unhappy about the condition of public taste in England, since we look with envy and admiration at the wonderful progress in public taste there, as shown in all articles of decorative manufacture within the last twenty years. "People fall into a way," he says, "of calling things 'quaint' and 'peculiar' which happen to differ from the conventional ugliness of a modern drawing-room. The faculty of distinguishing good from bad design in the familiar objects of domestic life is a faculty which most educated people—and women especially—conceive that they possess. How it has been acquired, few would be able to explain. The general impression seems to be that it is the peculiar inheritance of gentle blood, and independent of all training; that while a young lady is devoting at school, or under a governess, so many hours a day to music, so many to languages, and so many to general science, she is all this time unconsciously forming that sense of the beautiful, which we call taste; that this sense, once developed, will enable her, unassisted by special study or experience, not only to appreciate the charms of nature in every aspect, but to form a correct estimate of the merits of art manufacture. That this impression has gained ground so far as to amount to positive conviction, may be inferred from the fact that there is no single point on which well-bred women are more jealous of disparagement than on this. We may condemn a lady's opinion on politics, criticise her handwriting, correct her pronunciation of Latin, and disparage her favorite author with a chance

of escaping displeasure. But if we venture to question her taste, in the most ordinary sense of the word, we are sure to offend. It is, however, a lamentable fact that this very quality is commonly deficient, not only among the generally ignorant, but also among the most educated classes in this country. How should it be otherwise? Even the simplest and most elementary principles of decorative art form no part of early instruction. The public seem to think that the latest invention, although it violates every principle of good taste and design, must be the best, especially when it has the additional recommendation of being "fashionable," and we can hardly blame manufacturers for yielding to this morbid desire for change." Indeed, in this country, we ought rather to approve of change, since our designs are so generally bad, and there is always the chance that by a change we may be so fortunate as to get something better. We may derive a crumb of comfort from a remark of M. Viollet le Duc that no fashion lasts forever, not even an absurd one! In the twelve chapters of this work, Mr. Eastlake treats of street architecture, the entrance hall, the dining-room, the floor and the wall, the library, the drawing-room, wall furniture, the bedroom, crockery, table glass, dress and jewelry and plate and cutlery.

In the discussion of street architecture, in the first chapter, the remarks upon the use of iron in buildings have a deep interest to us at the present time. It is said that the shop-fronts of London indicate a great disregard of the first principles of construction. "At the present time, when each draper and silversmith wants to make a greater show than his neighbor, all semblance of strength is banished from the street level. Everything is given up to plate glass.

"Now plate-glass is an excellent material in its way, but we cannot expect it to support three or four stories of solid brick work. To meet this requirement, therefore, iron columns and iron girders are introduced, and, as artistic effect must yield to the stern necessities of commercial life, it would be idle to urge any but practical objections to the system. Such objections, however, are not wanting. The nature and properties of iron, although well studied by scientific engineers, are but imperfectly understood by the public. In addition to the chance of a flaw in the casting, or any of those more obvious contingencies to which stone and

wood are also subject, one fact stands pre-eminently forward. Every school-boy knows that iron expands with heat and contracts with cold. Let us suppose any large mansion in Belgravia, or a West End draper's establishment, attacked by fire; iron has been profusely introduced in its construction, and is affected in the ordinary way; the engines arrive and distribute water over the premises. Can any one doubt what the result would be?

"The iron-work thus suddenly cooled must, of necessity, be liable to fracture; and if the whole building tumbles to the ground, it need be no matter of surprise to those who are acquainted with the secret of its structure. It is quite time that these evils should be remedied by legislation. It would not be difficult to strengthen my argument by artistic considerations, but I am content to leave it in a practical form. It is unpleasant to live within ugly walls; it is still more unpleasant to live within unstable walls; but to be obliged to live in a tenement which is both unstable and ugly is disagreeable in a ten-fold degree. An Englishman's house was formerly said to be his castle. But in the hands of the speculating builder and advertising tradesman we may be grateful that it does not oftener become his tomb." The improvement in street architecture which has taken place within a few years is attributed by Mr. Eastlake to the revival of Gothic, "a style which, however modified by the influence of climate and national habits, in the various countries where it prevails, was everywhere distinguished by a uniform honesty of constructive purpose." In the chapter upon the Entrance Hall the practice of graining wood is condemned. It is much better either to stain the wood and then varnish it, which allows the natural vein to show, (and even in inexpensive wood the natural vein is quite pretty) or to paint it. To Philadelphians, wedded to their white shutters and doors, the colors recommended: a good flat tint of dark green or chocolate) will seem very heterodox. Articles in wrought-iron should be preferred to those in cast-iron, since "the work of the hammer and anvil is infinitely superior in every way to the production of the mould. All cast-iron ornament, except under rare conditions, is bad in style, and when employed to represent carving must be detestable in the eyes of a true artist. Better the simplest form of grate and fender than one loaded with this mean and spiritless system of decoration. A carpet of which the

pattern is shaded in imitation of natural objects becomes an absurdity when we remember that if it were really what it pretends to be, no one could walk on it with comfort. If we apply this principle to the treatment of cast-iron, it will be readily perceived that a noble material, which has lost in process of manufacture the most essential quality of strength which it possessed, can only be further degraded by being invested with forms which feebly imitate not only wrought-iron ornament but stone carving, and even plaster decoration."

Mr. Eastlake conducts his reader into "one of those respectable, luxurious, but eminently uninteresting London mansions." He approves of the rough, strong mat at the door, which answers perfectly its purpose, but he very properly condemns the mats of dyed sheepskin, placed elsewhere throughout the house, and upon which one is almost afraid to step for the purpose of wiping one's boots, and his approval of the first and condemnation of the second of these, give us an example of the test which should be applied to every ordinary household-object. Is it appropriate and does it answer its purpose? If it does not, we may be sure that it is inartistic and incorrect, and should be condemned. The use of encaustic tiles for hall-floors is recommended. The American editor tells us in a note that he would place tiles in the vestibule, and a parquet floor on the hall. In country houses in England, however, the entrance door opens immediately upon a wide hall, with no vestibule. With regard to our own houses we agree with Mr. Perkins in preferring *parqueterie* to tiles as the covering of our hall floors, but we should apply it also to the drawing-room, dining-room, and other floors, stipulating, however, that it should be better in design and in material than the specimens we have seen of it in this country.

Mr. Eastlake, speaking of tile manufacture, says it is one of the most hopeful branches of art manufacture, in regard to taste, now carried on in England. It has not only reached great technical perfection as far as the material and color are concerned, but, aided by the designs supplied by many architects of acknowledged skill, it has gradually become a means of decoration, which, for beauty of effect, durability and cheapness, has scarcely a parallel. To Messrs. Minton we are indebted for the earliest revival of this ancient art in modern times. The tiles manufactured by

Mr. W. Godwin have long been noted for the artistic quality of their color and design. But for rich variety of pattern, and for the skill with which the best types of ornament have been adapted for enamelled ware, plain tile pavements, mosaic and mural decoration, Messrs. Maw & Co., of Salop, stand almost unrivaled.

In the chapters on the Drawing-room and the Dining-room, Mr. Eastlake treats at length of furniture and gives many excellent examples of tables, chairs, book-cases, etc., which have been executed from his own designs. His observations about paper-hangings are, however, somewhat disappointing. His views are sufficiently correct, and the designs which he gives are in accordance with them (excepting, perhaps, a green and gold pattern in which the colors are positively bad), but it is unfortunate that he has not set his face against the prevalent taste for white papers. White paper (except in a large room where distance from the lights gives an acquired shade) always has the effect of depriving even our fairest friends of any beauty of color or complexion whatever; while it also makes the furniture stand out in tone with a harsh silhouette. Delicate neutral tints will produce a far more harmonious effect. The chapters on crockery, table-glass, dress and jewelry, and plate and cutlery, are all full of interest. There is no reason why the humblest household object should not be beautiful in form, color and proportion.

Owing, however, to the deficiency of taste among those who make articles of common use, as well as among those who select and purchase them, it is rare to find any that are not deficient in one or more of these requisites. Luxury is the enemy of refinement, the parent of rococo and of splendid monstrosities. In order that taste should last, and become general, its rise and progress must be simple and gradual; it must be sown and reared, and it will never flourish by mere transplanting. One of the most important points, says Sir Gardner Wilkinson, is that taste be general among all classes; but it is also essential that the beautiful should be combined with the useful; that proportion, good form and (when required) harmonious colors be combined in objects of every-day use; that rare and costly materials be not preferred to excellence of design; that good examples be imitated, rather than new designs invented merely for the sake of novelty; that one object be not employed for another of a different char-

acter ; that authority be not an excuse for a faulty design ; that the spirit, not the direct imitation, of natural objects be adopted for ornamentation ; and that the education of the eye be preferred to a mechanical adhesion to mere rules.*

American manufacturers, with a few honorable exceptions, do not employ first-class designers ; it is too expensive. They prefer to copy their designs from others, or to get them from ignorant and untrained designers. Possibly but a part of the blame can attach to them, since our public is perfectly content with the vile patterned wall-papers, carpets, curtains, and the many other equally inartistic articles which make up our domestic surroundings. It would be unfair, however, to deny that an improvement has taken place within a few years, due in great part to the intelligence of a few manufacturers ; but in art we are still in our infancy—we have hardly learned yet to walk. At such a time too great care cannot be exercised to strengthen and encourage right and to prevent wrong growth, and in this the responsibility rests to a great extent with the public. We hope that Mr. Eastlake's book, although perhaps too severely archaic in its canons of taste, will exercise a widespread and wholesome influence upon the adornment of the homes of the country, a matter which cannot be indifferent even to the moralist or the economist, as increasing their happy influence over the rising generation of our citizens, and diminishing the extent of the foolish and extravagant outlay upon articles of mere temporary value, upon which so much of the wealth of the land is wasted.† S.

* On Color and on the Necessity for a General Diffusion of Taste among all Classes. By Sir J. Gardner Wilkinson. London: John Murray, 1858.

† In a notice of "Hints on Household Taste," etc., in the December number of the *Atlantic Monthly*, Sir Charles Eastlake is spoken of as its author. The author (as we have stated above) is not Sir Charles, but his son, Mr. Charles L. Eastlake, who is nominally an architect, but really a dilettante and an art-writer and critic.

THE LATE PROF. JOHN F. FRAZER.

THE Faculties of Arts and of Sciences met in joint session at the University, Monday, October 14, 1872.

In the absence of Dr. Stille, occasioned by severe illness, Professor Jackson, being called to the chair, stated the mournful event which had called them together—the death of the oldest member of the Faculty.

Professor Allen, LL.D., the next in seniority to Professor Frazer, spoke with much feeling of the loss which they had sustained.

Our deceased colleague, he said, was undoubtedly one of those men whom we spontaneously recognize as unique. With the liveliest animal spirits, with the keenest enjoyment at the same time of out-of-door activity and of elegant society, he was always, even at the gayest period of his life, an enthusiastic and systematic student. His mind was quick in its action and penetration beyond example. No man ever mastered a subject more rapidly or could explain it more clearly or gracefully to others. He had received the most thorough classical training, under my learned predecessor, the venerable Dr. Wylie, and did not merely keep up, but constantly extended, his acquaintance with the Greek and Latin authors. In some departments of French literature he was also a master. As a professor no man ever performed his duties with more alacrity and energy, or with more perfect command of his subjects. His lectures were models. To his colleagues he was a delightful companion and a friend ever ready to oblige. He was one of those who attract and charm by an irresistible fascination. While brilliant in society, and chivalrous in his deportment toward women, he attached to himself, in the bonds of solid friendship, many whose friendship it was an honor to possess; these he never neglected or forgot, and they will never cease to cherish his memory.

Professor Krauth said: Though I have not had the long and intimate acquaintance with Professor Frazer which it has been the privilege of the older members of the Faculty to enjoy, yet I have known him long enough and well enough to be impressed with one

great distinctive element in his character—his manliness. This element was so marked as to make itself felt at once. It revealed itself in the expression of his countenance, in the tones of his voice, in the grasp of his hand, and in the frankness of his utterances. His virtues were those of a man—his faults were those of a man. He was strong, candid, averse to all concealment, furtiveness and evasion; hearty in affection, above all malice; yet equally above all the arts of the flatterer, the smoothness of the dissembler, the policy of the selfish creature. It required no second study of his position to know where he stood, no repetition of his words to know what he thought. Professor Frazer watched the movements of the scientific life of our day with the interest of one who knew well that in order to teach he must be willing to learn. But he watched their movements, not simply as a scholar, but as a man whose convictions, though never obtruded, had been cautiously and thoroughly formed. He did not regard with indifference the attempt to link the facts, or the plausible assumptions of science with theories which obscure, if they do not destroy the highest aspirations and purest hopes of our race. With the clear judgment which, simply as a man of science, he had formed against them, he combined a moral sympathy with the loftier views. He saw that, however these theories might complicate the processes, and multiply the links of the argument for a supreme First Cause, they could not finally avert, nor really weaken, the conclusion—and it was worthy of the vigor of his mind and the directness of his character that he preferred going to the conclusion in the straightest and most obvious cut. His own spirit was too noble to leave it possible that he should be indifferent to "the human heart by which we live." Venerable by the long years in which he so faithfully and successfully fulfilled the duties of his high position, most dear to those who knew him best, vigorous in intellect, inflexible in the right, incapable of the little or the dubious, alike as a teacher, a parent, and a man, he has left vacant a place which it will be hard to supply and almost impossible to fill.

Professor Lesley said that it would be difficult to do justice to the scientific ability and acquirements of the deceased. The pages of the *Journal of the Franklin Institute* were the best record that could be made of them. For many years he had been the editor of that journal. It was known throughout the scientific world,

in Europe as well as in America. It embodied all Professor Frazer's feeling for science. He was as remarkable for the thoroughness with which he studied every subject, as for the wide view he took of the whole field of the physical sciences. His early mathematical training made him a profound critic of the truth of statements of fact in all cases where first principles were involved. He was able to read the most advanced mathematical formulæ in the published papers of astronomers, physicists proper and mechanicians. Although chemistry was his special branch of instruction in the University, his preference was always for mechanics. The laws of force and their application to the shapes of machinery were his delight. Even in the dynamics of geology he was entirely at home, and he comprehended and explained with the greatest perspicacity and ability the adverse views of such men as Archdeacon Pratt, Thompson, Hennessy and Pierce. He was thoroughly acquainted with the history of electricity and steam, applied to practice. For many years he paid especial attention to and officially reported on all cases of boiler explosion. But there was no invention of any importance, even in metallurgy, a branch of science lying entirely outside the limits of his professional studies, of which he was ignorant. He was an omnivorous reader of the official publications of the Academies and Societies of science, abroad and at home, and of the scientific journals and magazines, keeping his mind awake to the progress of both theoretical and practical knowledge everywhere, while he refreshed it by reading and re-reading his favorite classics in the original Greek and Latin. His perfect acquaintance with the French language, and his ability to read German with comparative ease, placed at his disposal all the literature of the continent which was of chief value to a philosopher.

There was nothing narrow or local in his handling of this intellectual apparatus. His mind was philosophical in the best sense of the term, and he was as ready to discard an exploded theory, or accept an improved nomenclature, as he was zealous in defending forgotten demonstrations and resisting innovating hypotheses based upon a forgetfulness of facts and observations which had dropped out of sight. In this his memory was shown to be most tenacious. He sometimes used it in a startling way, especially when the credit of an important discovery was given to some

recent name. From the stores of his memory, or by reference to one antiquated book after another, he would trace the former steps of such a discovery backward from mind to mind, and from country to country, to its incipient suggestion. In fact, had he chosen to write books and affix his name to title-pages, he could easily have constituted himself the American historian of science, and his whole professional career was the illustration of the progress of science. He introduced a thousand anecdotes into his lectures, not only for the purpose of keeping the attention of his scholars awake to the subjects in hand, but to imbue their imaginations with that perfect fairness of judgment and complete collation of the knowledge of men of the past with that of the men of the present, by which alone a philosophical character of mind can be formed. This made him a distinguished teacher and won the confidence as well as excited the admiration of students.

Nothing roused his indignation to such a pitch as scientific dishonesty. Claiming absolutely nothing for himself, he punished with the most caustic invective the fictitious reputation of any man who stole the thoughts or discoveries of others, and many were the humorous stories which he had to tell how the borrowed plumes of this or that jackanapes had been plucked away. He was a fanatic for truthfulness and fair dealing in science and in everything else, and could not comprehend or make the least allowance for circumstances that threatened to compromise right or wrong. Perfectly fearless himself, and worshiping pluck and courage as the chief human virtues, he gave no quarter to the very shadow of equivocation or unfairness, no matter whom it concerned; and, although his feelings as an American were of the most energetic kind, nationality was nothing to him when a case of injustice arose.

The scientific life of Professor Frazer was not brilliant for original discovery, but only because he was devoted to his duties as scientific editor and teacher of science in the annual courses of the University, leaving him neither time nor disposition to pursue special trains of fresh research, for which he felt no ambition. More useful on this account, his loss falls with peculiar weight upon the institution of which he was one of the main pillars, on the city to which he confined the practice of his uncommon powers, and to his fellow-workers in science, who looked upon him as

an encyclopedia of learning and a judge in questions of difficult decision. He never lectured outside the University, and was therefore almost unknown to the lecture-going public; but while he despised thaumaturgy and the shows of science, he was an assiduous attender of all scientific lectures from which anything could be learned, if it were only a newer and better way to show an old experiment.

His loss we feel to be almost irreparable; yet that loss will knit us more closely together, and his memory will always be precious among us.

Prof. Jackson said: I should hardly venture to add anything to what has been said by my colleagues, but what my relations with Professor Frazer have been different in some respects from theirs. For, besides my associations with him for seventeen years in the Faculty, I was once his pupil, and am, indeed, one of his oldest University pupils, having been admitted Freshman a few months after he was elected to his professorship.

I could recall many proofs of his abilities as a teacher. He was wonderfully clear in his explanation of difficulties, peculiarly happy in his demonstrations (whether geometrical or algebraic) at the black-board, and always, in his lectures, kept the experiment, the fact, or the illustration, in entire subordination to the principle it was intended to elucidate. In all these points I have felt that he was a model instructor, while at the same time the discipline in his room was as nearly perfect as could be conceived.

But that of which I should rather speak was his frank, cordial, and kindly manner in all his intercourse with us. I well remember his friendly greetings in the street, the day after I entered college, calling me by name, though he could only have seen me in chapel; and from that day to this I have always felt that he was my friend.

We sometimes disagreed in the Faculty, and in matters of detail in the management of other college affairs, but in the fundamental principles, in our views of what college education ought to be, I knew that we thought alike. The difference between us was in the forms, rather than the realities; and hence, I never hesitated to speak to him with the utmost candor, knowing that whether we agreed or disagreed, I should always be understood and always have his sympathy.

Professor Frazer was not, I believe, a member of any religious denomination. The natural bent of his mind rejected all *forms* and all *ritual*, and his ready appreciation of the ludicrous and his abhorrence of all pretense prompted often a half-sportive, half-serious, stricture upon much that he saw in the religious world. But if any supposed that he trifled with the deep things of Eternity and Omnipotence, that his inquiries went no further than to that which was sensible and material, they could not have known his real character. In the quarter of a century that I have known him, while he always evinced a remarkable familiarity with the new speculations of scientists and metaphysicians, yet his faith seemed to me to remain unshaken, his faith, I mean, in God and His over ruling Providence, in the Bible, and in the Saviour, a belief based, as I think, not only on intellectual conviction, but upon a recognition of the truth, and purity, and universal love which the Saviour taught.

After a few remarks by other professors, the following resolutions, offered by Professor Allen, were seconded and adopted:

Resolved, That, as a mark of respect for the memory of our deceased colleague, the exercises of the University be suspended until the day after the funeral ceremonies.

Resolved, That the members of the Faculties of Arts and of Science attend the funeral in a body, and wear the customary badge of mourning for thirty days.

Resolved, That the chair of our deceased colleague, in the chapel, be draped in mourning for the remainder of the present term.

Resolved, That the following minute be entered upon the records of the respective Faculties, and that it be communicated to the family of the deceased, with the assurance of our sincere condolence with them in the great loss they have sustained:

"The Faculties of Arts and of Science of the University of Pennsylvania have learned with the deepest regret of the sudden death of their colleague, Professor J. F. Frazer, LL.D., and desire to record their appreciation of the remarkable accomplishments of the deceased in science and in literature, and of the extraordinary services which he rendered to the University during the more than twenty-eight years of his professorship, as well as to the cause of sound learning and of wholesome and manly discipline. Our close and intimate relations to the deceased in-

spired us with the liveliest regard for him as a scholar and a gentleman, and we deeply feel his loss when we recall his unmeasured devotion to the duties of his department, his zeal for the interests of the University and its students, and his keen insight and practical wisdom in all matters of business. We unite with the scientific men of the whole land in deploring the sudden removal of a teacher and a master mind in the department of physical science."

THE MONTH.

[It is not designed to discuss here all the chief topics of current interest, but only those upon which we have something to say.]

THE apparent prosperity which an era of inconvertible paper money produces inspires a people with false hope, and gives great popularity to the government. Increase the issue of currency, the value of commodities is changed and prices are advanced. This enhancement of prices will increase the demand for goods; trade will be stimulated from speculative motives; and soon, unless a new issue of currency is made, business will be checked. To answer all the demands of trade; to quiet the clamor of those classes of society who hold merchandise, real-estate or stocks bought for sale at an advance; by repeated issues of paper money can never work any real or permanent good, but only defer the evil day, for each new issue raises the price of commodities, and of course again causes a demand for money. The evils arising from the excessive issue of paper money bear with particular hardship upon salaried men, the laboring classes, and all those living upon fixed incomes, for salaries and wages never increase as rapidly as the prices of commodities consumed by them, and income accruing from interest upon bonds, stocks and mortgages, does not increase in the least. The commercial disturbances that follow the contraction of the circulating medium depreciates the price of commodities, so that the whole debtor class of the community, and the holders of merchandise, are subjected to loss, often amounting to absolute ruin. Should the contraction be hastened unduly,

a panic is created and the whole country is enveloped in financial disaster. We do not urge, or even advocate contraction of the paper currency, looking to a return to specie payments, for that cannot be done with safety until the pecuniary resources of the country grow up to the present issue of paper money, and until it measures the value of commodities upon the same relative basis as that by which such value is measured in foreign countries. But we do urge the importance of not increasing the issue of paper money, which is already in excess of the needs of trade. The amount of circulating medium in the United States prior to the war was about \$335,000,000, and was abundantly sufficient to satisfy all legitimate demands for money. During the year 1861 there was \$4,000,000,000 worth of products of industry in commercial circulation. In addition to this, exchanges of real estate were effected during the year to the amount of about \$1,200,000,000, so that \$5,200,000,000 represented the aggregate moneyed value of all species of property which was bought and sold in 1861; and these purchases and sales were effected by the means of \$335,000,000 of circulating medium.

Granting that the ratio of circulation in 1861 between the wealth and money of the country was a just one, and the proposition is tenable that, all other things being equal by just so much as the business of the country at the present time exceeds in amount that of the year 1861, in just that relative degree should the volume of our circulating medium be now extended. The increase in the amount of business of the country is about fifty per cent., and therefore the present annual business transactions of the country amount to about \$7,800,000,000. Now to preserve the proportion between the amount of wealth in circulation to that of money in the same ratio as in 1861, we find the requisite amount of circulating medium for the present period would be about \$506,500,000.

The paper money in actual circulation in the United States is about \$640,000,000. This amount does not include \$107,000,000 of legal tenders which the national banks hold as a reserve to protect their circulation and deposits. The exchangeable value of paper money depreciates in a direct ratio with the increase that is made in the amount in circulation, and a further conclusion is, that the prices of commodities of which paper money is the sole

measure of value increase in a direct ratio with the decline in the value of such a medium of exchange. Why then demand a further issue?

No one had any reason to suppose that the Civil Service Reform talk of the Philadelphia platform was anything more than a "buncombe plank," like the half-promise of woman suffrage, and the implied pledge to the Germans to discountenance Sunday and liquor laws. But it seems that the President, now that the campaign is over, means to select his new appointees *from inside the Republican party*, by the rules laid down by the Civil Service Commission. So much we infer from the official announcements made in regard to the New Orleans and New York custom-houses.

Very much has been made of the President's selection of a postmaster for our city in opposition to the wishes of the *professional* politicians. The facts are just these: three candidates were in the field, (1) one who thoroughly understood the work of the office, having been in it for twenty years, but who had no special backing except the good opinion of the community and his subordinates; (2) one who had been in the office a few years, knew its work very imperfectly, but had the support of the mercantile politicians, who busied themselves to secure the President's re-election; (3) one who knew nothing about the work at all, but had rendered good service to the party, and had the strenuous support of men of his own class, the professional politicians. We rejoice that the third candidate was not chosen, but in what principle that Messrs. Curtis & Cattell would accept was the first candidate passed by in favor of the second.

Now, we are not sticklers for the competitive examination system. We can conceive of no system of examination that would secure competent men for most of the places in the gift of the government. But the principle of seniority in service—*ceteris paribus*—does seem to us a wise and judicious basis for selection, and in this case it was grossly violated in a way that men would think ruinous in a commercial establishment.

As for *examination*, we really think that a law giving all the offices to *red-headed* men, in the order of their application, would

be as wise. That, at least, would secure us men of marked character and emphatic temper; but what does competitive examination secure us? Is the country to employ only those that have ready utterance, and are to a certain extent "well-informed," with no reference to qualities of a practical sort? We are misled by English example here. Let us first get the American civil service up to the level of the English unreformed civil service, in which every official below the Cabinet held office during life or good behavior, and we can safely leave the appointment of the proportionately few that fall to the lot of any one President, to be decided as he will. Appointments will then be so reduced in number that the public will have time to give careful attention to every selection, and make its opinion felt. The "spoils" of the campaign will be so diminished in their aggregate, that the hungry horde of *professionals* will be forced to adopt some method of earning a living. In a word, the whole status of affairs as it was under our first two Presidents will be restored, and the blows inflicted upon the public tranquillity by Jefferson and Jackson will be healed.

THE principles laid down and practical lessons enforced by one of our reviewers last month, in his notice of Captain Shaw's work, were hardly in print when the Boston fire came to illustrate and enforce them. The district in whose flames so much wealth went to destruction was a newly-built and beautified region, and everything seemed to have been done to make the fire wide-spread. The U. S. weather observer of the port ascertained that the currents of air to the burning district from all quarters blew at the rate of thirty miles an hour, making a draft about as strong as that of an iron furnace. Hence the almost ungoverned fury with which an extensive fire rages in a city, and which is one of the most perplexing elements of the municipal problem. Our city, and every large city on the continent, should at once adopt and enforce—as regards old buildings, as well as new—the stringent regulations that the Chicago and Boston fires point out as necessary.

THE Epizootic Hippozymosis has been a costly experience to the country, both in the loss of large numbers of valuable horses

and in the temporary withdrawal of the rest from their useful labors. The wealth of the nation is a process, not an accomplished fact, and every check or interruption is a most costly one. Like all epidemics, or rather epizootics, the disease is a mystery; our men of science know no more of its cause than Sydenham did when he spoke of "an epidemic constitution of the air." The theory of epidemic transmission by sporules, animalculæ, etc., is but an unsubstantiated hypothesis. In the present case there has been a large element of justice mixed up with the infliction; it was in general those horses that were commonly neglected or refused rest during the course of the disease that succumbed to it—sometimes dying of a curious disintegration of the blood, in other cases of lung disease. The symptoms of dropsy were deceptive; swelling there was, but no aqueous deposits in the swollen parts.

REALLY worthy of all the praise it has received is the selection made by General Grant to fill the place left vacant by the death of our brave and modest general, the victor of Gettysburg. General McDowell, the new Major General, is no friend of the President's, and General Hancock, the new commander of the Department of the Atlantic, has hitherto suffered in his chances of promotion from being politically in the opposition. Our State, without distinction of party, is proud of Hancock, as she once was of Mifflin, and grateful for the change.

GENERAL GRANT has been re-elected by an increased majority and a smaller vote than in 1868. The opposition was evidently breaking down with every successive week of the campaign, but the figures clearly show that the people accepted him mainly because they regarded Mr. Greeley in his new affiliations as a *pis aller*.

NEW BOOKS.

PRIMEVAL MAN.—*An Examination of some Recent Speculations;* by the Duke of Argyle. DeWitt C. Lent & Co. New York, 1872. Small 8 vo., cloth, pp. ix., \$2.00.

The Duke of Argyle has already been favorably known to the American reading public by his admirable work, entitled "The

Reign of Law;" and we feel sure that the same public will gladly welcome the reprint of this, his last work, which first appeared as a series of papers in *Good Words*, and was afterward, in 1869, published in book form.

This little work, which the author's modesty prompts him to call an "Essay," seems to have been prompted by the paper upon "The Early Condition of Mankind," which was read by Sir John Lubbock, at the meeting of the British Association for the Advancement of Science in 1867, and which was a reply to a lecture on "The Origin of Civilization" by Dr. Whately, the late Archbishop of Dublin, published in 1854. This paper of Sir J. Lubbock's, the author says, "Confirmed an impression I have long had that Whately's argument, though strong at some points, is at others open to assault; and that, as a whole, the subject now requires to be differently handled and regarded from a different point of view. On the other hand, the paper has convinced me that the argument in favor of what may be called the savage theory, is very much the weaker of the two, and rests upon a method of treatment which is much more inadequate and incomplete." This extract from the introductory chapter sufficiently shows the position the author occupies upon the question. After some further remarks, intended "to clear the ground of some preliminary difficulties that might otherwise have impeded a proper access to the subject," the author proceeds to an inquiry into "the primitive condition of mankind," resolving the subject into three questions, that are separately and independently considered, viz.: 1st. The origin of man considered simply as a species; that is to say, the method of his creation or introduction into the world. 2d. The antiquity of man, or the time in the geological history and preparation of the globe at which this creation or introduction took place. 3d. His mental, moral and intellectual condition when first created.

It is evident that the discussion of these questions must necessarily go over the whole ground of the "Darwinian theory" controversy. This is done with a completeness and thoroughness that is truly surprising, when the size of the "Essay" is considered, and also with a fairness and succinctness that has much of the impartiality of a judicial "summing up" about it. Its condensation precludes us from making an abstract of it that would be likely to do it anything like justice. The author's argument like that of both Whately and Lubbock professes to be purely and strictly a scientific one—that is, conducted irrespective of any belief in the Mosaic narrative of creation; what the author's views on that narrative are, may be gathered from the following splendid sentiment, clearly suggested by the "*Alta humiliter, pauca copiose*" of St. Augustine. "Certain it is, that whatever new views may now be taken of the origin and authorship of the

first chapter of Genesis, it stands alone among the traditions of mankind in the wonderful simplicity and grandeur of its words. Specially remarkable—miraculous it really seems to be—is that character of reserve which leaves open to reason that all reason may be able to attain. The meaning of those words seems always to be meaning ahead of science—not because it anticipates the results of science, but because it is independent of them, and runs, as it were around the outer margin of all possible discovery."

The conclusion reached by the author, though not stated in so many words is—*First*: That man did not descend or develop from some other creature "not worthy to be called a man"—an expression in Sir J. Lubbock's paper which seems to have especially excited the opposition of the author; and *Second*:—That what is called "utter barbarism" is not the primitive condition of mankind, but the result of a law, inherent in the constitution of humanity that may be termed the law of degradation—a law analogous in its workings and effects to the law of mental and moral degradation in the case of the nation or the individual with which it is closely allied.

The sole defect in this "Essay," and it is one which, while it does not in any way invalidate the argument and the conclusions arrived at, nevertheless weakens the one, and deprives the other of what would be an irresistible support, is that like both Whately and Lubbock, the author admits the fallacy that "man is an animal"—an old aphorism, but one that is utterly false. Man is a separate and wholly distinct order of existence, as separate and distinct from the animal as the animal is from the plant, and as both are from inanimate or mineral existence; and between the "utter barbarian" of Sir John Lubbock and Darwin's gorilla there is a "great gulf fixed." It is the admission of this fallacy that has hitherto given the supporters of the Darwinian theory an immense advantage over their opponents; even our author is at times unconsciously driven to fall back upon a truth of which he nevertheless seems to be in willful ignorance.

In this "Essay" the general reader will find by far the best and most important statement of the most advanced views that are current on the subject the author is discussing that has yet appeared, all presented with a clearness and precision that cannot be too highly praised, and that will enable those unacquainted with the controversy in its original form to obtain a correct notion of the latest speculations thereon.

LUCRETIVS ON THE NATURE OF THINGS. Translated into English verse by Charles Frederick Johnson, with Introduction and Notes. Pp. 333. New York: Published by De Witt C. Lent & Co.

If a critic of the old school had been asked "Which are the

greatest of the Roman poets?" he would not have hesitated much in answering: "Horace and Virgil." If a critic of our times, judging by the new canons, be asked the same question, the chances are that he will say, "Catullus and Lucretius." There are not wanting those who put the latter far above all his competitors, as evincing the greatest poetic gifts that any Roman author ever possessed. As might be expected, the man is receiving far more attention of late years. Critics like Lachman, Bernays and the English Munro have exerted their powers of divination upon the sadly mutilated text of his poem, and now we have a translation of it into blank verse by an American author, from which readers ignorant of Latin, or "somewhat deaf on the Latin side of the heads," may see for themselves where the man's attraction, lie.

Here is a polemical and didactic poem on a philosophical subject, in which the author, following the conceptions of two Greek teachers, aims at the overthrow of the national religion of Rome. He writes in the language formed in camps and the forum, yet under his grasp it becomes pliable enough to express all the delicate shades of meaning and reproduce all the compound phrases of the Greek, without destroying its native purity of vocabulary and idiomatic construction. His subject leads him to discuss all sorts of details, matters of scientific fact and matters of philosophic opinion, yet he is as much alive to these, and feels and excites as keen an interest as Lucan or Virgil in describing the battles of actual men. His chief object is to overthrow in men's minds all belief in the unseen world and its terrors, and yet he writes with a moral earnestness that no other author of the Republic seems to share, that anticipates Tacitus and Juvenal. He is striking at the national mythology to destroy it root and branch, yet his very motive is the Roman sense of law and order, authoritative and all-pervading. He was as wonderful an instance of the moral divorce between a right heart and a wrong head as ever lived.

Much of the neglect from which he once suffered was due to the dislike felt for his opinions. As he has come to be better understood, and his main purpose seen into, and the tenderness and the strength of the man appreciated, that feeling has passed away. His natural philosophy, which he took from Epicurus, as Epicurus borrowed it from Democritus of Abdera, is not so obsolete. Democritus remarkably anticipated the mechanical view of the universe which is held by modern science, and it is to be regretted that we have only very incomplete fragments of his works left us.

Mr. Johnson has done his work as translator very fairly, and his book is creditable to our classical scholarship. On the whole, however, the translation does not seem to us to equal the original in force and dignity, partly because the translator works without

the author's passion, partly, also, because it would require a Wordsworthian command of the vocabulary of philosophic poetry to do justice to Lucretius.

ENGLISH LITERATURE Considered as an Interpreter of English History. Designed as a Manual of Instruction. By Henry Coppee, LL. D., President of the Lehigh University. Pp. 488. Published by Claxton, Remsen & Haffelfinger, Phila.

To the author of this book, as our instructor in literature, we owe much of our relish for many departments of English poetry. His reading of Chaucer, Spenser, and the older masters of rhythm, was to us like the rendering of an old musical masterpiece by a great performer—it was an “interpretation.” He seems to reproduce the very accents and to transfer us back to the place of them that first heard it. We were not disappointed, then, but gratified to find that it is the æsthetic side, more even than the historical, that he approaches in his book. There he is thoroughly at home and master of his work. History is to him the development of taste, of mental refinement, of the graceful culture of scholarship. His mind is essentially of the un-Puritan type, and even in approaching severer themes he enters always by “the gate of the Temple called beautiful.”

In this treatment of our literary history, President Coppee has all the standard authorities of our literature on his side. All that wrote before Thomas of Ecclefechan and of Chelsea, were as one in accepting graceful and tasteful writing the careful selection of interesting details and their artistic presentation as the test of all true literature. Even now that is the dominant idea, and Lessing, Carlyle and the rest are as yet literary heretics, lying under the greater excommunication.

President Coppee's book is a very graceful and scholarly presentation of the literary history of England from this point of view. It has much in common with Henri Taine's great book, but we happen to know that the idea was conceived before Taine's work was announced, and the execution has certainly been entirely independent of the Frenchman's labors. Unlike the German historians of literature, who treat a vast number of authors in their survey of any one period, uniting in one view what is characteristic of the period as exemplified in various ways by various men, he takes a few of the stars of larger magnitude and discusses their life and works at considerable length. Thus Spenser, Shakespeare, Bacon, the English Bible, and Milton, are taken as exemplifying the period between the Reformation, with briefer notices of Marlow and the early dramatists, of Hall and Chillingworth, and of Butler, Cowley, and Walton. This method gives us a book more satisfactory to the general reader, *more readable*, as we say, and perhaps better adapted to give the ordinary

student a clear, definite and abiding impression than if less space had been given to these few in order to find room for Raleigh, Hooker, Donne, Ben Jonson, Massinger, Beaumont, Fletcher, Shirley, Wither, Marvell, and a host of lesser names upon whom a Gervinus would have dwelt. Some compensation we have for these omissions in brief notices of the less noted authors at the end of certain chapters, but the presence of these do not alter the general plan of the work in relation to its main idea.

Our chief objection to President Coppee's plan, in spite of its many excellencies, is what seems to us the unsatisfactory theory of history itself. Our view is the severe and Puritan one of Carlyle, not the lighter and sunnier one of "our standard literature." We confess an agreement with the old Puritans that any mirth and joyousness that is not solemnized and chastened by a full and clear memory of all the graver problems of life and existence, is unworthy of man. We cannot deny the faults and shortcomings of manners and morals that characterize the *Jacobs* of history, but we hold with Holy Writ in putting them before the *Esau*s. These were the men that made English history and England's greatness—the men of severe and earnest enthusiasm, whatever their faults of life and manner, or to whatever degree others may have more gracefully adorned it. The Elizabethan drama is to us not more a fact illustrative of English history than the righteous and zealous—if not always judicious—opposition to its obscenities and faults that was raised by Prynne and the Puritans; so, again, of the drama of the Restoration and its just castigation by Collier, Law, and other non-juring Puritans, as we may justly call them. The history of England is in the Puritan view no less the history of English ethics and English liberty than of English enlightenment and refinement.

A MANUAL OF AMERICAN LITERATURE: A Text-book for Schools and Colleges. By John S. Hart, LL.D., Professor of Rhetoric and of the English Language in the College of New Jersey. pp. 641. Published by Eldredge & Bro., 17 North Seventh street, Philadelphia.

Some books written for one purpose are chiefly valuable for some other, and this we think is one. What sort of a college it would be that could use this closely printed specimen of literary *pemmican* as a text-book, we are at a loss to imagine. Careful selections from it might be so employed; but the chief use of the book would be as a work of reference. For the latter purpose, indeed, there is a deficiency of dates of publication, but still the book is not a bad *American Allibone*. More than one volume on our own shelves has risen immensely in our esteem since we read Dr. Hart's brief notice of its author and began to have some connected idea of the man. Those who need a book of that

sort—editors, and the like—will find this one eminently handy. To foreigners also, who wish to get some idea of the immense quantity of our native literature, the book will be invaluable. Mr. Hart's plan seems to be to omit no name of any importance, no book that has any claim to rank as literature. He has drawn largely on Allibone and other co-laborers, and added a great deal of his own. In many cases, but of course in but a small percentage of the whole range of authors, he has added specimens of the author's work. We can praise his taste and his catholicity. Thus, under Bret Harte, he gives us that "American Iliad in a nutshell"—*The Heathen Chinese*—in full.

One fault in the book is its lack of literary perspective. Very insignificant authors take up a whole page or two pages, large extracts from very second-rate poetry being of quite frequent occurrence. We notice, again, that Princeton is in the foreground, and its professor of English literature the central figure. Half a page is accorded to a graduate of 1868, who published a volume of poems with some pretty conceits in them—more space than is given to Horace Bushnell, or Albert Barnes, or Dr. Shedd.

Among the omissions that occur to us in a cursory examination are: Mr. Mulford, the author of *The Nation*, our first political philosopher; Captain John Hay; one of the always confounded Headleys, but, like the Dutchman, we "never know t'other from which;" Willis P. Hazard, one of our real metaphysicians; several of the Bacon family; Thomas K. Beecher, of Elmira, author of *Our Seven Churches*; Sylvanus Cobb, Sr., the theologian; Dr. John W. Mears, author of *The Bible in the Workshop*, etc.; Dr. F. D. March, of our city; St. John, author of *The American Farmer's Letters*; President Henry Coppee; Provost Charles J. Stille, author of *History of the Sanitary Commission, How a Free People Conduct a Long War*, etc.; Drs. Wood and Hodge, of our city, and other standard medical authors.

Of those that are given imperfectly or inaccurately: Xavier Donald McLeod, who is described as "educated an Episcopalian," was a son of the Dr. Alexander W. McLeod of page 134; Dr. S. B. Wylie came to America in 1799, not 1797; Dr. Cheever's edition *de luxe* of Walton's *Complete Angler* is omitted; Mr. Barnes's larger commentaries and his two most characteristic books—*Evidences of Christianity in the Nineteenth Century*, and his *Discussion with Gerrit Smith*—are omitted; Mr. H. C. Carey might be a native and resident of Alaska for anything the reader is told; Davis's *Version of the Psalms* is credited to our State, to the great injury of New Jersey; Dr. J. W. Nevin's books are said to be of a mystical tendency, while, in fact, they are thoroughly High Church; Dr. Dorner's (Berlin) controversy with him is passed over; Dr. George Bush's Swedenborgian works are all

omitted; so with Dr. Elder's *Questions of the Day*; so with Woobury M. Fernald, a man of almost genius.

We might extend the list, but this is enough, and for all its defects of plan and execution, the book is a handy, compact and useful one.

THE EUSTACE DIAMONDS. By Anthony Trollope. New York: Harper & Brothers. 1872. For sale by J. B. Lippincott & Co.

We believe that most of Mr. Trollope's admirers will agree with us in ranking "The Eustace Diamonds" among his cleverest productions. The characters in some of his slighter works often bear so close a resemblance to their predecessors that, in reading them, one is tempted to feel as a child might in getting a present of a kaleidoscope, and who naturally fancies that his new treasure will be a never failing source of delight, but soon finds out to his dismay, that the shapes and colors of the bits of glass are always the same, and that the only variety he can hope for will be found in their different combinations. In "The Eustace Diamonds" there is little or nothing to complain of on this score. The more prominent characters are quite fresh, and there is a background of old friends from "Phineas Finn" and "Can You Forgive Her?" that serves to give a home-like air to the book. Mr. Trollope forestalls any possible accusation of want of originality in the conception of his principal character, by calling Lady Eustace, at the outset of the story, an "opulent and aristocratic Becky Sharp," but the very fact that her beauty, position and wealth give her such immense advantages over her less fortunate prototype, lessens the resemblance between them. A better comment on the text of "Honesty is the best policy" could hardly be derived than the history of her career affords, and her unbounded capacity for lying makes it impossible to unravel the mystery of the diamonds, and thus brings about sudden turns in the story which both amaze and amuse the reader. Frank Greystock and Lucy Morris are, we are thankful to say, less uncommon and more agreeable characters, although there may be some reservation with regard to the former. He is, we suppose, not an unfair representation of a man of the world, with expensive tastes, who has his own way to make and is not very scrupulous as to the manner of making it, but poor little Lucy, with her brave heart and generous temper, is surely worthy of a better fate than she is likely to meet in marrying such a man. She, like all Mr. Trollope's favorite heroines, is blind in her devotion to her lover, and ready to be taken or left by the man, whose affection and plighted word could not stand before the temptation of money or beauty, and who would have deserted her with but little compunction if circumstances had not been too much for him. The only thing to be said in his defense is, that a man to whom a woman makes love is certainly placed

in an embarrassing position, and, between the reluctance he naturally feels at giving a decided rubuff, and the flattered consciousness of being an object of interest to a beautiful creature, who desires nothing better than to bestow herself and her fortunes upon him, is at once put at a disadvantage.

On one remark of Mr. Trollope's it would be interesting to collect opinions from those qualified to express one. He says: "To be alone with the girl to whom he is not engaged is a man's delight; to be alone with the man to whom she is engaged is a woman's delight. Many scenes in the book are delightful, and we should like to enjoy them over again with the sympathizing reader, but will confine ourselves to mentioning a few among those which have particularly struck us. In the beginning of the book Lady Fawn's visit to her future daughter-in-law, and the honest-hearted, high-minded old lady's suppressed consternation at the effusive hypocrisy of the younger one, is very well done. So also is the interview between Lord Fawn and Lucy, in which, instead of apologizing and doing penance for her misdeeds, as he expects, her hot temper gets the better of her again, and she makes matters worse by repeating the offense. The scene of the fox hunt is very graphic, and despite our dislike of Lizzie Eustace, we cannot help sympathizing with her pluck and hoping that she will get the better of Lucinda. Of Lucinda we had hopes that her horror of husband-hunting and pretense were going to work out for her a happier destiny, but Mr. Trollope seems to feel that she has touched pitch too long to come out spotless from the contact, and he can find no better escape for her than insanity. The scenes between her and Sir Griffin are painful and disagreeable, and the story would have been far pleasanter had they both been left out of it.

The Duke of Omnium's enjoyment of the mystery of the diamonds and his mingled horror and secret satisfaction that the brother of a marquis should be involved in the crime of stealing them is very good. We suppose we see the last of him as he toddles off to bed with Lady Glencora and Madame Max Goeslar to look after him. Lady Glencora has come to be a great lady indeed, and exercises the privileges of her position in alternately snubbing and patronizing her friends, as she thinks they need one or the other mode of treatment.

Mr. Palliser is as earnest over the subdivision of the English penny into five farthings as he was in times past over the number of eggs consumed at breakfast every morning in Baden. The recapitulation of the situation which Mr. Trollope seems to think it necessary to give in every third or fourth chapter of his serial stories for the benefit of casual readers, swells the size of the book somewhat alarmingly, but a judicious practice of the

art of skipping enables one to get through it without great expenditure of time.

MIDDLEMARCH: A study of provincial life. By George Eliot. In two volumes. Vol. 1. Pp. 468. New York. Published by Harper & Brothers. For sale by J. B. Lippincott, Philadelphia.

Mrs. Lewes' latest novel is passing through a trying ordeal because of its publication in parts. The interval since *Felix Holt* has been so long that the question is very naturally raised whether her powers are declining or growing, and many answer unfavorably. We rise from perusing the first installment of *Middlemarch* with the conviction that all her old power is here. We do not believe that Shakespeare excels her in the essentially dramatic gift, the power to seize on a character in its inmost traits, and to depict its development under the modifying force of circumstances. Compared with her what painting with a white-wash brush is Scott's and Dickens' best work! Here is group after group that no man ever forgets again, after he has once met them, yet not the slightest straining for effect is discovered in any one picture of their life and its surroundings. Of course the book is full of unpleasant things, like all her books, and the second volume will be worse than the first. She is no optimist in her view of life; she thoroughly and systematically disbelieves in poetical justice. The clue to this, we are convinced, is not personal lack of hopefulness or constitutional melancholy, or perennial biliousness of any sort, mental or physical. It is her philosophy of life, which is some type of Positivism.

It occurred to us in our study of this work that all her writings had possibly a polemical aim, and were meant to bring out into strong and clear light the imperfections and anomalies of our present form of social organization, as the first step to a better and a higher one, perhaps one in which the principles of Positivism would take the place now held in the popular mind by sundry Christian maxims and methods. She seemed to be saying: "You see what a pretty world you are making of it, where souls full of high and generous aspirations—like this Dorothea Brooke—have no career open to them; where knavish old fools like Featherstone are left free to wreck and ruin young lives by false pretenses and silly caprices; where bright and well-meaning lads like Fred Vincey are kicked about because their wheels don't fit into the common ruts; where pompous hypocrites like Bulstrode move society at their will, and have things their own way; where irresolute old fools like Brooke come to the surface and are accepted by society as its natural kings. How much better some social state in which life was consecrated by motives which men understand and appreciate, and by sacraments of social worth and significance; when a man's place was fixed by some wise and com-

petent authority, that had an eye to see and a hand to act. But faugh! You go your own way, with your precious right to do wrong, and this is where you end." But this is mere conjecture, and every reader must fix his own valuation of it.

THE MINISTRY OF SONG. By Frances Sidney Havergal. Pp. 205. New York: De Witt C. Lent & Company. Philadelphia: Claxton, Remsen & Haffelfinger.

This pretty volume in blue and gold is one of the many contributions made in this generation by persons of its author's sex, to our really devotional poetry. Her poems are already widely known in America by their republication in our many periodicals, and we have no doubt that the reception accorded to them in their present form will be such as they merit. The book is not padded out with prosaic "goodness," and the author's relationship to a well-known church musician has born fruit in the musical rhythm of her poetry. We would find fault, however, with the lack of chaste simplicity and the superabundance of verbal ornament, which shows that her discipline in rhetoric has not been severe enough. This, however, is less prominent in the directly devotional pieces than in the narrative poems. The most ambitious piece in the book is an attempt to characterize the three great Oratorios of Haydn, Mendelssohn and Handel. It certainly shows fine musical feeling and large powers of expression.

Oliver Twist, with Twenty-eight Illustrations by J. Mahoney. 8 vo. Paper 50 cents. Cloth \$1.00.

Martin Chuzzlewit, with Fifty-nine Illustrations by J. Barnard. 8vo. Paper \$1.00. Cloth \$1.50.

The Old Curiosity Shop, with Fifty-four Illustrations by Thomas Worth. 8vo. Paper 75 cents. Cloth \$1.25.

David Copperfield, with portrait of Author and Sixty-one Illustrations by J. Barnard. 8vo. Paper \$1.00. Cloth \$1.50. New York: Harper & Bros. For sale by J. B. Lippincott & Co.

These volumes belong to the Household Edition of the Works of Dickens, and they compare most advantageously with all others; the illustrations are excellent and the prices of the different volumes are wonderfully low. Those who have not yet furnished themselves with the works of Charles Dickens cannot do better than by getting this new edition.

BOOKS RECEIVED.

The Reign of Law. By the Duke of Argyle. New York: De Witt C. Lent & Co. 1872. For sale by Claxton, Remsen & Haffelfinger. Price \$2.00.

Salad for the Solitary and the Social. By an Epicure. Redressed and compounded with sundry additional esculents, succulents and condiments. Illustrated with fifty-two original designs by eminent American artists. New York: De Witt C. Lent & Co. 1872. For Sale by Claxton, Remsen & Haffelfinger. Price \$4.00.

Station Life in New Zealand. By Lady Barker. New York: De Witt C. Lent & Co. 1872. For sale by Claxton, Remsen & Haffelfinger. Price \$1.50.

The Earth a Great Magnet; a Lecture delivered before the Yale Scientific Club, February 14, 1872, by Alfred Marshall Mayer, Ph. D. (No. 9, University Series.) New Haven: Chas. C. Chatford & Co., 1872.

The Adventures of a Brownie. By the author of "John Halifax, Gentleman." New York: Harper & Bros. 1872. For sale by J. B. Lippincott & Co. Illustrated 16 mo. Cloth 90 cents.

The School of the Army in Germany and France, with a diary of Siege-life at Versailles. By Brevet-Major-General W. B. Hazen, U. S. A., Colonel Sixth Infantry. New York: Harper & Bro. 1872. For sale by J. B. Lippincott & Co. Crown. 8. vo. \$2.50.

California: A book for Travelers and Settlers. By Charles Nordhoff. New York: Harper & Bro. 1872. For sale by J. B. Lippincott & Co. 8 vo. Paper \$2.00. Cloth \$2.50.

The Issues of American Politics. By Orrin Skinner. Philadelphia: J. B. Lippincott & Co., 1872. Crown. 8 vo. Cloth \$2.50.

Report made to the Philadelphia Society for alleviating the miseries of Public Prisons, on the proceedings of the International Congress, held in Middle Temple Hall, London, July, 1872. By Joseph R. Chandler, one of the Vice-presidents of the Society, and its Delegate to the Congress. Philadelphia: 1872.

The Outcast and other Poems. By J. W. Watson. Philadelphia: T. B. Peterson & Bros. Price \$2.

Bessie, a novel. By Julia Kavanaugh. New York: D. Appleton & Co. For sale by Porter and Coates. Price 75 cents.

A Lonely Life; a novel. By J. A. St. John Blythe. Philadelphia: T. B. Peterson & Bros. Price \$1.75.

The Fifth Annual Report of the Public Library of Cincinnati, June, 1872. Cincinnati: 1872.

The Doctor's Dilemma; a novel. By Hesba Stretton. New York: D. Appleton & Co. Paper. Price 75 cents. For sale by Porter & Coates.

The Seven Kings of the Seven Hills. By Mrs. C. H. B. Laing. Philadelphia: Porter & Coates. Price \$1.00

Bellina's Norma (with Italian and English words). Edited by Arthur Sullivan and J. Pitman. London and New York: Boosey & Co. For sale by W. H. Boner & Co., 1102 Chestnut street. Paper \$1.00. Cloth with gilt edges \$2.00.

Dollinger's Fables and Prophecies of the Middle Ages. Edited by Prof. H. B. Smith. New York: Dodd & Mead, 1872. For sale by Claxton, Remsen & Haffelfinger.

Hornhurst Rectory. By Sister M. F. Clare. New York: D. & J. Sadlier & Co., 1872. For sale by Peter F. Cunningham.

Life of Father Mathew. By Sister M. F. Clare. New York: D. & J. Sadlier & Co., 1872. For sale by Peter F. Cunningham.

A Biographical Dictionary. By the Rev. R. Parsons. New York: D. & J. Sadlier & Co., 1872. For sale by Peter F. Cunningham.