

COMMON SCHOOLS

AND

TEACHERS' SEMINARIES.

By CALVIN E. STOWE, D. D.,

PROFESSOR OF BIBLICAL LITERATURE, LANE SEMINARY, CINCINNATI, OHIO.

BOSTON:

MARSH, CAPEN, LYON, AND WEBB.

1839.

LA624
.57

Entered according to Act of Congress, in the year 1839, by
MARSH, CAPEN, LYON, AND WEBB,
in the Clerk's Office of the District Court of Massachusetts.

EDUCATION PRESS.

0591530

ADVERTISEMENT.

THE first of the following pieces is a 'Report on Elementary Public Instruction in Europe, which was made to the General Assembly of Ohio, in December, 1837.' It was printed by the Legislature, and copies sent to every school district in the State. The Legislature of Pennsylvania also published it, both in English and German, and distributed it throughout that State. It was again printed, by the Legislature of Massachusetts, and it has also been published in Michigan, New York, and several other States. Notwithstanding this extensive supply, the demand for it still continues ; and it is now accordingly reprinted, with corrections by the Author.

The second piece is an article originally published in the American Biblical Repository, for July, 1839. Its purpose is to promote the same great object that is contemplated in the first, and the Author hopes it may prove not less acceptable and useful.

REPORT

ON

ELEMENTARY PUBLIC INSTRUCTION.

To his Excellency the Governor, and the Honorable the General Assembly, of the State of Ohio :

IN March, 1836, just before I embarked for Europe, I received a communication from Governor Lucas, with the great seal of the State, enclosing the following resolves of the General Assembly, *to wit :*

“ *Resolved, by the General Assembly of the State of Ohio, That C. E. Stowe, Professor in one of the literary institutions of this State, be requested to collect, during the progress of his contemplated tour in Europe, such facts and information as he may deem useful to the State, in relation to the various systems of public instruction and education which have been adopted in the several countries through which he may pass, and make report thereof, with such practical observations as he may think proper, to the next General Assembly.*

“ *Resolved, That his Excellency the Governor be requested to transmit a certified copy of the foregoing proceedings to Professor Stowe.*”

In pursuance of the above resolutions, I communicated the intention of the General Assembly to Honorable A. Stevenson, the American Minister near the British Court, and he very readily furnished me with the credentials necessary for the most satisfactory attainment of the object of my inquiries. I am also happy to remark, that the communication of Governor Lucas was a ready passport to my free admission to every public institution in

Europe to which I applied ; and that my endeavors were seconded, in the most encouraging manner, by all the gentlemen connected with the educational establishments in the several countries through which I passed ; and the warmest expressions of approbation were elicited, of the zeal manifested by so young a State as Ohio, in the great cause of general education. Particularly in some of the old communities of central Europe, where it happened to be known that I was born in the same year in which Ohio became a sovereign State, it seemed to be matter of amusement, as well as gratification, that a man, who was *just as old as the State in which he lived*, had come, with official authority, to inquire respecting the best mode of education for the growing population of his native land ; and they remarked that our Governor and Legislators must be very enlightened and highly-cultivated men. When, in one instance, I informed them that our Governor was a plain farmer, and that a majority of our Legislators were of the same occupation, the well-known line which a Latin poet applies to husbandmen, was applied to us :—

“O fortunatos nimum, si sua bona norint !”

“O happy people, if they do but appreciate their own blessings !”

In the progress of my tour I visited England, Scotland, France, Prussia, and the different States of Germany ; and had opportunity to see the celebrated Universities of Cambridge, Oxford, Edinburgh, Glasgow, Paris, Berlin, Halle, Leipsic, Heidelberg, and some others ; and I was every where received with the greatest kindness, and every desirable facility was afforded me for the prosecution of my inquiries. But, knowing that a solid foundation must be laid before a durable superstructure can be reared, and being aware that, on this principle, the chief attention of our Legislature is, and for the present must be, directed to our common schools, my investigation of the universities was comparatively brief—and the most of my time was spent in visiting the best district schools I could hear of, and also the high schools intended for

the business education of young men, and the institutions for the education of teachers.

Before I proceed to the result of my inquiries on these topics, I would call the attention of the Legislature to some facts of a more general nature, which strongly impressed themselves upon my mind during the progress of my tour ; and which, it seems to me, have a very important bearing upon the successful maintenance, if not the very existence, of free institutions in our country. I allude particularly to the wonderful change which has taken place in the policy of monarchical governments in respect to the education of the people. Formerly it was supposed that despotism could be maintained only by a sovereign with an army devoted to his interests, and dependant only upon himself for subsistence ; an aristocracy which should monopolize the wealth and the intellectual culture of the entire nation ; and a mass of people held in entire ignorance of their rights and privileges as men, and condemned to drudge during life for a bare and precarious subsistence—the mere dependants and slaves of the higher orders. But what is the aspect which the sovereignties of Europe now present ?—and what is the change which is forcing itself along, even into the despotisms of Asia and Africa ? Ever since the revolution which separated this country from the British empire, the idea of popular rights has been working its way irresistibly throughout the civilized world ; and sovereigns who have had the sagacity to see the unavoidable results, have adapted their measures to the new aspect of the times. A new era in the history of civilization has evidently commenced. A despotic king, of the Protestant faith, dreading the evils of an ignorant and unbridled democracy, such as was witnessed in the French Revolution, has now, for forty years, been pursuing a course of instruction for his whole people, more complete, better adapted to develop every faculty of the soul, and to bring into action every capability of every kind that may exist, even in the poorest cottage of the most obscure corner of his kingdom, than has ever before been imagined. Men of the highest order of intellect and most extensive attainments are encouraged

to devote themselves to the business of teaching ; the best plans for the furtherance of this object are immediately received and generously rewarded ; talent and industry, wherever they exist, are sought out and promoted ; and nothing is left undone that can help forward this great design.

The introduction of this system was preceded by political changes, which, considered as emanating from the government itself, have scarcely a parallel in the history of nations. When Frederick William III. ascended the throne of Prussia, in 1797, the condition of the people was in many respects truly deplorable. But immediately upon his accession he set about reforming abuses, and introducing improvements. The odious religious edict was abolished ;* the administration of justice was thoroughly reformed, and rigid economy introduced into the royal household. The exclusive privileges of the nobles were taken away, and their power so completely broken, that there is now no hereditary aristocracy which can interfere with the sovereign, or oppress the people.

In 1810 the peasantry, who before had no ownership in the soil which they cultivated, and consequently no independence of character, by a royal decree, became freeholders on the following terms, namely : those who held their lands on perpetual lease, by giving up one third, and those who held them on limited or life leases, by giving up one half, to the landlord, became the owners in fee-simple of the rest. The military is now so modelled, that every citizen between the ages of eighteen and twenty-one is in actual service in the standing army, where he is instructed in all that pertains to military life, and then returns to his peaceful occupations. Thus the army is made up entirely of citizens—and every citizen is a soldier ; and there is no such thing as a standing army at the entire devotion of the sovereign, and independent of the people.

The Prime Minister, Hardenberg, in a circular pub-

* This edict required every clergyman of the established Church to swear adhesion to a minute creed, issued by royal authority, or abandon his calling.

lished at the time when these reforms were in progress, declares, that "the new system is based upon the principle, that every subject, personally free, be able to raise himself, and develope his powers freely, without let or hinderance from any other ; that the public burdens be borne in common and in just proportions ; that equality before the law be secured to every subject ; that justice be rigidly and punctually administered ; that merit, in whatever rank it may be found, be enabled to rise without obstacle ; that the government be carried on with unity, order, and power ; that, by the education of the people, and the spread of true religion, the general interests, and a national spirit be promoted, as the only secure basis of the national welfare."

Another European king, of the Roman Catholic faith, Louis of Bavaria, who is connected by marriage with the royal house of Prussia, moved by this example, and excited by emulation in behalf both of his church and kingdom, is now zealously pushing forward the same experiment among his own people, and already the Bavarian schools begin to rival the Prussian ; and the University of Berlin finds its only equal in that of Munich. Louis has in one thing gone even beyond his brother of Prussia, in that he has granted to his people a real constitutional representation in the government, a privilege and a right which the Prussians have labored in vain to extort from Frederick William.

Even the Autocrat, Nicholas of Russia, (married to a daughter of the Prussian monarch, who inherits much of her father's spirit,) has been induced to commence a similar system throughout his vast dominions ; and from the reports to the Emperor of M. d'Ouvaroff, the Russian Minister of Public Instruction, it appears that already, from Poland to Siberia, and from the White Sea to the regions beyond the Caucasus, including the provinces so recently wrested from Persia, there are the beginnings of a complete system of common-school instruction for the whole people, to be carried into full execution as fast as it is possible to provide the requisite number of qualified teachers.

Thus three sovereigns, representing the three great divisions of Christendom, the Protestant, the Romish, and the Greek, are now zealously engaged in doing what despotic sovereigns have seldom done before—enlightening and educating their people ; and that too with better plans of instruction, and a more efficient accomplishment in practice, than the world has ever before witnessed. Nor is the spirit of education confined to these nations. The kingdom of Wirtemberg, and the grand duchy of Baden, are not behind Prussia or Bavaria. The smaller States of Germany, and even old Austria, are pushing forward in the same career ; France is all awake ; Spain and Italy are beginning to open their eyes ; the government of England—which has hitherto neglected the education of the common people more than any other Protestant country of Europe—is beginning to bestir itself ; and even the Sultan of Turkey, and the Pacha of Egypt, are looking around for well-qualified teachers to go among their people. In London and Paris I saw Turks, Arabs, and Greeks, who had been sent by their respective governments to these cities, for the express purpose of being educated for teachers in their native countries ; if not for the whole people, at least for the favored few. At Constantinople a society has been formed for the promotion of useful knowledge, which publishes a monthly journal, edited by one of the Turks, who studied in Paris ; and the Sultan now employs a French teacher in his capital, whom he especially invited from France. And here too in our own country, in the movements of New England, New York, Pennsylvania, Ohio, Michigan, and several other of the States, we are strongly reminded of the educational zeal of the age.

In short, the whole world seems to be awake, and combining in one simultaneous effort for the spread of education ; and sad indeed will be the condition of that community which lags behind in this universal march.

But I wish to direct your attention to the influence which these wide-spread systems of education in the sovereignties of Europe, emanating from Prussia, must exert on our own institutions. The sovereigns to whom I have

alluded are not only educating the people, but they are laying aside the pomp, the trappings, and the lavish expenses of royalty, and by simplicity, by rigid economy, by an energetic and impartial administration of the government, are endeavoring to establish their thrones in the hearts of their people.

Frederick William, in his dress, appearance, and whole deportment, is as simple and unostentatious as an Ohio farmer ; and few of our wealthy merchants ride in so plain a carriage, or sleep on so homely a bed, as the monarch of Prussia. After witnessing the pageantry, the pomp, and ostentation of the limited monarchy of England, one is astonished at the rigid simplicity of the great military despotism of central Europe.

In every stage of instruction it is made a prominent object, and one which is repeatedly and strenuously insisted on in all the laws pertaining to education, to awaken a *national spirit*—to create in the youthful mind a warm attachment to his native land, and its institutions, and to fix in his affections a decided preference for the peculiarities of his own country. Indeed, the whole plan (which is well understood to have originated in Prussia, when the rapid spread of republican principles first began to threaten the thrones of Europe) evidently is, to unite with the military force which always attends a despotism, a strong moral power over the understanding and affections of the people. In view of this fact, an able English writer denominates the modern kingdom of Prussia, “that wonderful machine of State-craft—as a mere machine the most remarkable in existence—on the model of which most European governments are gradually proceeding to reform themselves.” Already has this plan so far succeeded, that there is evidently in these countries a growing disregard for the *forms* of free government, provided the *substance* be enjoyed in the security and prosperity of the people.

Republicanism can be maintained only by universal intelligence and virtue among the people, and disinterestedness and fidelity in the rulers. Republics are considered the natural foes to monarchies ; and where both start

up side by side, it is taken for granted that the one must supplant the other. Hence their watchful jealousy of each other. Now, when we see monarchies strengthening themselves in the manner described, are not republics exposed to double danger from vice, and neglect of education within themselves? And do not patriotism, and the necessity of self-preservation, call upon us to do more and better for the education of our whole people, than any despotic sovereign can do for his? Did we stand alone—were there no rival governments on earth—or if we were surrounded by despotisms of degraded and ignorant slaves, like those of the ancient Oriental world; *even then*, without intelligence and virtue in the great mass of the people, our liberties would pass from us. How emphatically must this be the case *now*, when the whole aspect of things is changed, and monarchies have actually stolen a march upon republics in the promotion of popular intelligence!

·EFFORTS FOR EDUCATION IN RUSSIA.

IN a former report, which was printed by order of the Legislature, in 1836, I gave a synopsis of the governmental regulations in Prussia respecting education, and I have not found, by investigations on the spot, that the state-ments then made require any essential modification. [See Appendix A.] I will here, however, take the liberty of stating some facts respecting the governmental efforts recently made in RUSSIA, to establish a system of popular education throughout that vast empire. These cannot but be deeply interesting to us, since Russia has so many points of resemblance, and of striking contrast, to our own country. Like the United States, her dominion extends over an immense territory, comprising almost every variety of soil, climate, productions, and national character. Like ours, her educational institutions are comparatively new, and almost every thing is to be begun in its elements;] and, like us, she has received great

accessions to her population by emigrants from almost every nation of Europe. Russia is unquestionably the largest and most powerful of despotisms, as the United States is the largest and most powerful of republics : and, while we enjoy the greatest political freedom that any government has ever permitted, she is held fast by the bonds of a severe autocracy. Add to this, Russia is the only European government, with the exception of Great Britain, whose territories border on our own. The fact, then, that a system of public instruction has been established in the Russian empire, is one of deep interest to us ; and no less interesting will it be for us to know something of the nature of the system, and of the means by which it is carried into operation.

The general system is that of Prussia, with such modifications as are necessary to adapt it to that widely-extended, and, in some parts, semi-barbarous empire. For example, the whole empire is divided into provinces, each of which has a university—these provinces into academic districts, which are provided with their gymnasias for classical learning, and academies for the higher branches of a business education ; and these academic districts are again subdivided into school districts, each with its elementary school. As the heart of the whole system, there is at St. Petersburg a model school for the education of teachers of every grade, for all parts of the empire. Of the universities, six had already gone into operation in 1835, namely ; one at St. Petersburg, one at Moscow, one at Dorpat, in Livonia, one at Charkow, east of the river Dnieper, one at Kasan, on the Wolga, and one at Kiew. At other points lyceums are established, with courses of study more limited than that of the universities ; and there is an institution at Moscow, especially for the education of the nobility. Of course, I shall not be understood as recommending for adoption by us whatever I speak of with approbation in reference to foreign lands ; for the different circumstances of nations require different systems. It is the part of a wise legislator to examine all the improvements within his reach, and, from the whole, to select those

parts only which are adapted to the peculiar circumstances of the people for whom he legislates.

The different institutions in Russia are established as fast as the circumstances of the people admit, and as teachers can be found to supply them. At the date of the last report of the Minister of Public Instruction, the number of elementary and parish schools was about 12,000—of private schools, 430—and of gymnasia, 67.

The governmental regulations for cherishing in the people a desire for education, and directing them in the attainment of it, are wisely adapted to the purpose. The Minister of Public Instruction publishes a regular periodical journal, in which he gathers up all the facts, information, and arguments, to which his official station gives him access, and circulates them extensively through the nation. To illustrate the good faith, diligence, and liberal-mindedness with which he executes this part of his office, I would refer to the number of his journal for August, 1835, in which he notices, with great approbation, the efforts of tract societies for the diffusion of moral and religious sentiments among the people, and mentions by name several publications of the American Tract Society, which have been translated into Russian, as having reached a third edition, and as being happily calculated to enlighten the intellect, and elevate the character of the people among whom they circulate. If the Minister of the Emperor Nicholas shows so much readiness to receive a good thing even from democratic America, we surely will not be so narrow-minded as to spurn a good idea because it happened first to develope itself in autocratic Russia. As a further means of promoting education, every school-director and examiner undergoes a rigid scrutiny as to his intellectual and moral fitness for those important trusts; and every candidate for civil office is strictly examined as to his attainments in those branches of learning requisite to the right performance of the official duties to which he aspires. As common schools are new in the Russian empire, and as school-houses are to be built in every part of it, the government, knowing the importance of having these houses well planned and put

up, has appointed an architect, with a salary of one thousand rubles a year, for every academic district, whose whole business it is to superintend the erecting and fitting up of the district school-houses in his particular province. When we recollect how many of the evils of our district schools result from the bad construction and wretched furniture of our school-houses, how completely, by these defects, the efforts of the best teachers may be nullified, and the minds and health of children, as well as their comfort, destroyed, we cannot but acknowledge this to be, for a country where every thing is to be begun from its foundation, a most judicious arrangement.

Canals, and other public improvements of this kind, are now in great demand, and, to further them, an institution has been established for the express purpose of teaching the arts requisite in their construction ; and young men who intend to devote themselves to this business, are taken from the other schools and placed in this institution at the public expense. Special provision, also, is made for instruction in agriculture, and all the kindred arts, in order that the natural resources of the country may be fully developed. That religious instruction may be efficient, and, at the same time, the rights of conscience remain inviolate, clergymen of different Christian denominations, where the circumstances of the people require it, are employed as religious teachers in the schools, their services compensated by government, and their families provided for, if necessary. The importance of female teachers is recognised, and every encouragement is held out to young ladies to engage in this work. Private teachers are subject to the same rules, and the same strict inspection, as the teachers of public schools ; and, what is an improvement on the Prussian plan, if the teacher of a private school becomes superannuated, or dies, in the service, his family are entitled to the same privileges as that of a public teacher, and receive pensions from the government adequate to their support and education. Thus all classes of faithful teachers are regarded and treated as public benefactors, and considered as entitled, not merely to a bare support, while toiling and wearing them-

selves out in the public service, but to national remembrance and gratitude after their work is done.

Though the Emperor of Russia is justly accused of unpardonable oppression in respect to Poland, yet he does not carry his oppression so far as to deprive the poor Poles of the benefits of education, but is exerting the same laudable zeal to provide teachers for Poland as for any other part of his dominions. It has been found exceedingly difficult to obtain teachers who are willing to exercise their calling in the cold and inhospitable regions of Siberia. To facilitate this object, special privileges have been granted to Siberian teachers. Siberian young men are admitted to the University of Kasan free of expense, on condition that they devote a certain number of years to the business of school-keeping in Siberia. To forward the same object, a Siberian gentleman, by the name of Ponomarew, gives six thousand rubles a year for the support of the parish schools of Irkutsk, quite to the northeastern extremity of Siberia, and has obligated himself, for ten years, to pay five hundred rubles a year more, for the encouragement of the pupils of those schools.

Teachers from foreign countries are welcomed, and special provision is made that their religious sentiments be not interfered with, as well as that they do not impose their peculiar religious notions on their pupils. For the perfecting of teachers in certain branches, they are often sent abroad, at the public expense, to study in the institutions of other countries, where these branches are most successfully taught. Of these, there were, in 1835, thirteen in Berlin, several in Vienna, and one in Oxford, England. School-examiners and school-committees, as well as school-teachers, are required to hold frequent meetings for discussion, and for mutual instruction and encouragement.

It is the policy of the Minister of Public Instruction, not to crowd the schools with too many pupils, but to furnish as many teachers as possible, particularly in the higher institutions, that each individual scholar may receive a due share of attention. As an illustration, I will refer to some of the universities. The University of St. Peters-

burgh has two hundred and thirty pupils, and fifty-two officers and teachers, or one teacher to every four or five students. At Moscow, four hundred and fifty-six students, one hundred and sixty-eight teachers and officers, or one to every two or three students. That of Kasan, seventy officers and teachers, to two hundred and thirty-eight students, or one to every three or four students. That at Kiew, forty-three officers and teachers, to sixty-two students, or nearly as many of the one as the other. I would remark, however, that some of the teachers are merely lecturers on particular branches, and take no active part in the discipline or instruction of the institution, and a few attend only to its business concerns. Some of the universities, also, are not full, the institutions being new, and a full corps of teachers being appointed at the commencement. With all these allowances, however, we may set it down as a principle, that in the universities, it is intended that there shall be one teacher at least to every eight or ten students. This may be going to excess, but it is certain that the ambition to multiply students beyond all the means of teaching, has been a great injury to education in American institutions. Education can never be what it is capable of being, unless the teacher can command time to become familiar with each individual mind under his care, and to adapt his mode of teaching to its peculiarities. To instruct only in masses, and to apply the same methods of instruction to all, is like throwing the drugs of an apothecary's shop into one great caldron, stirring them together, and giving every patient in the hospital a portion of the mixture.

It is peculiarly interesting, in noticing the efforts of Russia, to observe that the blessings of a good common-school education are now extended to tribes which from time immemorial have been in a state of barbarism. In the wild regions beyond mount Caucasus, comprising the provinces recently acquired from Persia, the system of district schools is efficiently carried out. As early as 1835, there were already established in those parts of the empire fifteen schools, with sixty teachers, and about one thousand three hundred children under instruction ; so

that, in the common schools of this new and uncultivated region, one teacher is provided for every twenty scholars. Besides this, there is a gymnasium at Tifflis, in which Asiatic lads are fitted to enter the European universities.

All teachers, throughout the empire, according to an ordinance of February 26, 1835, receive their salaries *monthly*, that their attention may not be distracted by family cares. For the encouragement of entire devotedness on the part of teachers, and to prevent all solicitude for the maintenance of their families, the Minister of Public Instruction is authorized to grant to the widows and orphans of those teachers who have particularly distinguished themselves, not only the usual pension, but a gratuity equal in amount to an entire salary of two years.

The officers of government employed in the distant provinces of the empire, in the distant parts of Siberia, and on the borders of Persia, complained that their remote location deprived their children of the advantages of the gymnasia and universities which others enjoyed. To obviate this inconvenience, and to equalise as far as possible the advantages of education, the children of these officers are taken to the nearest gymnasium or university, and their travelling expenses defrayed by government. All the institutions of education are subject to the same rigorous examination as in Prussia, and the Minister of Public Instruction is, *ex officio*, chairman of the board of examiners for the universities. As the duties of this office have become very laborious, the government, in addition to a liberal supply of other helps, in 1835 appointed General Count Protassow, who had for some time acted as a school-director, Assistant Minister of Public Instruction.

I have already mentioned the model institution for teachers at St. Petersburg. In 1835, seventy-six teachers were graduated, and the number is every year increasing. Under the influence of this school, and other governmental arrangements, the methods of teaching are continually improving; and, in his Report for 1835, the Minister observes, that the moral improvement of both

teachers and pupils is such as to encourage the most pleasing hopes, that, within the last two years, the national interest in the subject of education has very greatly increased, and that it has now become a matter of the deepest interest to the whole people; and that, as to the methods of instruction, the old mechanical *memoriter* mode is continually giving way to the system of *developing the faculties*. Many facts are stated in the Report, which confirm the Minister's remark in respect to the growing interest in the minds of the Russian people on the subject of education, illustrating the important fact, that among whatever people a good system of instruction is efficiently carried out, a deep and general interest will be excited. The nobles and the commons appear to emulate each other in the advancement of this cause. The nobility of Novgorod voluntarily contribute more than twelve thousand rubles a year for the gymnasium in that place, and at Wologda the nobility contribute for a similar object nine thousand a year. At Cronstadt, the citizens volunteered to sustain a school at their own expense. At another place, on the shores of the White Sea, the citizens have not only volunteered to maintain the school, but have also, of their own accord, entered into an obligation to erect a large and handsome stone building for the accommodation of the teachers and scholars. This was brought about by the zeal and activity of a single individual, whose name, though a barbarous one, ought here to be mentioned—Wassiligi Kologriew. This gentleman volunteered as an agent to promote the cause of education in the place of his residence, and, besides giving his time and efforts, bore an equal share in all the expenses, and in addition, made a distinct donation of twenty-five hundred rubles for the advancement of the cause.

Another gentleman at Archangel, by the name of Kowalewsky, made a journey to a distant neighborhood inhabited by Samoiedes, Sirianes, and other half-barbarous tribes, to explain to them the advantages of education, and endeavor to establish a school among them. In this he was warmly seconded by the clergyman of the place; and, as the result of it, a single peasant or farmer, by the

name of Anuphriew, engaged to support the school entirely for two years, and after that to contribute three hundred rubles a year for five years longer ; and in addition to this he contributed fifteen hundred rubles for the erection of a school-house. The chief magistrate of the place also contributed, and, allured by these examples, the Sirianes put down nearly fifteen thousand rubles ; and as soon as the requisite preparations could be made, the school was opened, with great solemnity and appropriate ceremonies, in the midst of an immense concourse of intensely-interested spectators. I shall be greatly disappointed if we cannot find in Ohio, enlightened men in our cities, and farmers in the country, willing to do as much for education as the gentleman of Archangel, and the hard-working peasant in the frozen regions of northern Russia.

A merchant by the name of Pluessin, in Lialsk, made a donation of ten thousand rubles for the foundation of a district school in that place, and offered, in addition, to have the school kept in his own house, and to furnish it with firewood for three years. Tschistow, a citizen of Moscow, gave twenty-three hundred rubles for the purchase of school-books, to be distributed among the poor children of the first school district in that city.

Numerous other instances might be mentioned of donations from persons in all ranks in society—in money, books, houses, fuel, or whatever they had it in their power to give for the support of schools ; but the above may be sufficient to show the spirit of the people, and excite us to emulation.

It must be observed, that the government makes provision for the maintenance of all the district schools, gymnasias, and universities ; and that this liberality of private citizens arises from pure zeal for the cause, and is applied to the extending and increasing the advantages derived from governmental patronage, to the purchase of books and clothing for the poorer children, the establishment of school libraries, and the providing of suitable rewards for meritorious teachers and pupils, and securing the means of access to the school-house, and proper furniture for it. Every effort is made to provide a plentiful supply of good

school-books, and to establish suitable libraries for the use of teachers. Quite recently, a Russian lady, a Miss Darzoff, received from the government a premium of twenty-five hundred rubles for compiling a little work, entitled 'Useful Readings for Children.'

In view of such facts as these, who is not ready to exclaim, "Well done, cold, semi-barbarous, despotic Russia!—may other nations, more favored by Nature and Providence, emulate thy example!"

INTERNAL ARRANGEMENTS OF THE PRUSSIAN SCHOOLS.

I WILL now ask your attention to a few facts respecting the internal management of the schools in Prussia and some other parts of Germany, which were impressed on my mind by a personal inspection of those establishments.

One of the circumstances that interested me most, was the excellent order and rigid economy with which all the Prussian institutions are conducted. Particularly in large boarding-schools, where hundreds, and sometimes thousands of youth are collected together, the benefits of the system are strikingly manifest. Every boy is taught to wait upon himself—to keep his person, clothing, furniture, and books, in perfect order and neatness; and no extravagance in dress, and no waste of fuel or food, or property of any kind, is permitted. Each student has his own single bed, which is generally a light mattress, laid upon a frame of slender bars of iron, because such bedsteads are not likely to be infested by insects, and each one makes his own bed and keeps it in order. In the house, there is a place for every thing, and every thing must be in its place. In one closet are the shoe-brushes and blacking, in another the lamps and oil, in another the fuel. At the doors are good mats and scrapers, and every thing of the kind necessary for neatness and comfort, and every student is taught, as carefully as he is taught any other lesson, to make a proper use of all these articles at the right time, and then to leave them in good order at their proper places. Every instance of neglect is sure to receive its appropriate reprimand, and, if necessary,

severe punishment. I know of nothing that can benefit us more than the introduction of such oft-repeated lessons on carefulness and frugality into all our educational establishments ; for the contrary habits of carelessness and wastefulness, notwithstanding all the advantages which we enjoy, have already done us immense mischief. Very many of our families waste and throw away nearly as much as they use ; and one third of the expenses of housekeeping might be saved by system and frugality. It is true, we have such an abundance of every thing, that this enormous waste is not so sensibly felt as it would be in a more densely populated region ; but it is not *always* to be so with us. The productions of our country, for some years past, have by no means kept pace with the increase of consumption, and many an American family during the last season has felt a hard pressure, where they never expected to feel one.

Especially should this be made a branch of female education, and studied faithfully and perseveringly by all who are to be wives and mothers, and have the care of families.

The universal success also, and very beneficial results, with which the arts of drawing and designing, vocal and instrumental music, moral instruction and the Bible, have been introduced into schools, was another fact peculiarly interesting to me. I asked all the teachers with whom I conversed, whether they did not sometimes find children who were actually incapable of learning to draw and to sing. I have had but one reply ; and that was, that they found the same diversity of natural talent in regard to these as in regard to reading, writing, and the other branches of education ; but they had never seen a child who was capable of learning to read and write, who could not be taught to sing well and draw neatly, and that too without taking any time which would at all interfere with, indeed, which would not actually promote, his progress in other studies. In regard to the necessity of moral instruction, and the beneficial influence of the Bible in schools, the testimony was no less explicit and uniform. I inquired of all classes of teachers, and of men of every grade of religious faith, instructors in common schools, high schools,

and schools of art, of professors in colleges, universities, and professional seminaries, in cities and in the country, in places where there was a uniformity and in places where was a diversity of creeds, of believers and unbelievers, of rationalists and enthusiasts, of Catholics and Protestants; and I never found but one reply; and that was, that to leave the moral faculty uninstructed was to leave the most important part of the human mind undeveloped, and to strip education of almost every thing that can make it valuable; and that the Bible, independently of the interest attending it, as containing the most ancient and influential writings ever recorded by human hands, and comprising the religious system of almost the whole of the civilized world, is in itself the best book that can be put into the hands of children to interest, to exercise, and to unfold their intellectual and moral powers. Every teacher whom I consulted, repelled with indignation the idea that moral instruction is not proper for schools; and spurned with contempt the allegation, that the Bible cannot be introduced into common schools without encouraging a sectarian bias in the matter of teaching; an indignation and contempt which I believe will be fully participated in by every high-minded teacher in Christendom.

A few instances, to illustrate the above-mentioned general statements, I here subjoin:—Early in September I visited the Orphan-House at Halle, an institution founded by the benevolence of Franke, about the year 1700, and which has been an object of special favor with the present King of Prussia. It now contains from twenty-seven hundred to three thousand boys, most of them orphans, sustained by charity. After examining its extensive grounds, its commodious and neat buildings, its large bookstore, its noble printing-establishment, for printing the Bible in the oriental and modern languages, its large apothecary's shop, for the dispensation of medicine to the poor, and the exquisitely beautiful statue of its founder, erected by Frederick William III., I was invited by Drs. Guerike and Netto to go into the dining-hall and see the boys partake of their supper. The hall is a very long and narrow room, and furnished the whole length of each

side with short tables, like the mess-tables on board a man-of-war, each table accommodating about twelve boys. The tables were without cloths, but very clean, and were provided with little pewter basins of warm soup, and just as many pieces of dark and coarse, but very wholesome, bread, as there were to be boys at the table. When the bell rang, the boys entered in a very quiet and orderly manner, each with a little pewter spoon in his hand. When they had arranged themselves at table, at a signal from the teacher, one of the boys ascended a pulpit, near the centre of the hall, and, in the most appropriate manner, supplicated the blessing of God upon their frugal repast. The boys then each took his bit of bread in one hand, and, with his spoon in the other, made a very quiet and healthful meal. They then united in singing two or three verses of a hymn, and retired in the same quiet and orderly manner in which they had entered. It being warm weather, they were dressed in jackets and trousers of clean, coarse brown linen; and a more cheerful, healthy, intelligent set of youthful faces and glistening eyes I never saw before; and notwithstanding the gravity with which they partook of their supper and left the hall, when fairly in the yard, there was such a pattering of little feet, such a chattering of German, and such skipping and playing, as satisfied me that none of their boyish spirits had been broken by the discipline of the school.

At Weissenfels, near Lutzen, where the great battle was fought in the 'Thirty Years' War, there is a collection of various schools, under the superintendence of Dr. Harnisch, in what was formerly a large convent. Among the rest there is one of those institutions peculiar to Prussia, in which the children of very destitute families are taken and educated at the public expense, to become teachers in poor villages, where they can never expect to receive a large compensation: institutions of a class which we do not *need here*, because no villages in this country *need* be poor. Of course, though they have all the advantages of scientific advancement enjoyed in the most favored schools, frugality and self-denial form an important part of their education. Dr. Harnisch invited me to this part

of the establishment, to see these boys dine. When I came to the room, they were sitting at their writing-tables, engaged in their studies, as usual. At the ringing of the bell they arose. Some of the boys left the room, and the others removed the papers and books from the tables, and laid them away in their places. Some of the boys who had gone out then re-entered, with clean, coarse table-cloths in their hands, which they spread over their writing-tables. These were followed by others with loaves of brown bread, and plates provided with cold meat and sausages, neatly cut in slices, and jars of water, which they arranged on the table. Of these materials, after a short religious service, they made a cheerful and hearty meal ; then arose, cleared away their tables, swept their room, and, after a suitable season of recreation, resumed their studies. They are taught to take care of themselves, independent of any help ; and their only luxuries are the fruits and plants which they cultivate with their own hands, and which grow abundantly in the gardens of the institution.

INSTITUTIONS FOR REFORMATION.

AT Berlin, I visited an establishment for the reformation of youthful offenders. Here boys are placed who have committed offences that bring them under the supervision of the police, to be instructed, and rescued from vice, instead of being hardened in iniquity by living in the common prison with old offenders. It is under the care of Dr. Kopf, a most simple-hearted, excellent old gentleman ; just such a one as reminds us of the ancient Christians, who lived in the times of the persecution, simplicity, and purity, of the Christian church. He has been very successful in reclaiming the young offender, and many a one, who would otherwise have been for ever lost, has, by the influence of this institution, been saved to himself, to his country, and to God. It is a manual-labor school ; and to a judicious intermingling of study and labor, religious instruction, kind treatment, and necessary severity, it has owed its success. When I was there, most of the

boys were employed in cutting screws for the railroad which the government was then constructing between Berlin and Leipsic ; and there were but few who could not maintain themselves by their labor. As I was passing with Dr. K. from room to room, I heard some beautiful voices singing in an adjoining apartment, and on entering I found about twenty of the boys, sitting at a long table, making clothes for the establishment, and singing at their work. The Doctor enjoyed my surprise, and, on going out, remarked, " I always keep these little rogues singing at their work, for while the children sing, the devil cannot come among them at all ; he can only sit out doors there and growl ; but if they stop singing, in the devil comes." The Bible and the singing of religious hymns, are among the most efficient instruments which he employs for softening the hardened heart, and bringing the vicious and stubborn will to docility.

A similar establishment in the neighborhood of Hamburg, to which I was introduced by Dr. Julius, who is known to many of our citizens, afforded striking examples of the happy influence of moral and religious instruction, in reclaiming the vicious and saving the lost. Hamburg is the largest commercial city of Germany, and its population is extremely crowded. Though it is highly distinguished for its benevolent institutions, and for the hospitality and integrity of its citizens, yet the very circumstances in which it is placed, produce, among the lowest class of its population, habits of degradation and beastliness of which we have but few examples on this side the Atlantic. The children, therefore, received into this institution, are often of the very worst and most hopeless character. Not only are their *minds* most thoroughly depraved, but their very senses and bodily organization seem to partake in the viciousness and degradation of their hearts. Their appetites are so perverted, that sometimes the most loathsome and disgusting substances are preferred to wholesome food. The superintendent, Mr. Wichern, states, that though plentifully supplied with provisions, yet, when first received, some of them will steal and eat soap, rancid grease, that has been laid aside for the purpose of greas-

ing shoes, and even catch May-bugs and devour them ; and it is with the utmost difficulty that these disgusting habits are broken up. An ordinary man might suppose that the task of restoring such poor creatures to decency and good morals was entirely hopeless. Not so with Mr. Wichern. He took hold with the firm hope that the moral power of the word of God is competent even to such a task. His means are prayer, the Bible, singing, affectionate conversation, severe punishment when unavoidable, and constant, steady employment, in useful labor. On one occasion, when every other means seemed to fail, he collected the children together, and read to them, in the words of the New Testament, the simple narrative of the sufferings and death of Christ, with some remarks on the design and object of his mission to this world. The effect was wonderful. They burst into tears of contrition ; and during the whole of that term, from June till October, the influence of this scene was visible in all their conduct. The idea that takes so strong a hold when the character of Christ is exhibited to such poor creatures, is, that *they are objects of affection* ; miserable, wicked, despised as they are, yet Christ, the Son of God, loved them, and loved them enough to suffer and to die for them—and still loves them. The thought that *they can yet be loved*, melts the heart, and gives them hope, and is a strong incentive to reformation.

On another occasion, when considerable progress had been made in their moral education, the superintendent discovered that some of them had taken nails from the premises, and applied them to their own use, without permission. He called them together, expressed his great disappointment and sorrow that they had profited so little by the instructions which had been given them, and told them that, till he had evidence of their sincere repentance, he could not admit them to the morning and evening religious exercises of his family. With expressions of deep regret for their sin, and with promises, entreaties, and tears, they begged to have this privilege restored to them ; but he was firm in his refusal. A few evenings afterwards, while walking in the garden, he heard

youthful voices among the shrubbery ; and, drawing near unperceived, he found that the boys had formed themselves into little companies of seven or eight each, and met, morning and evening, in different retired spots in the garden, to sing, read the Bible, and pray among themselves ; to ask God to forgive them the sins they had committed, and to give them strength to resist temptation in future. With such evidence of repentance, he soon restored to them the privilege of attending morning and evening prayers with his family. One morning soon after, on entering his study, he found it all adorned with wreaths of the most beautiful flowers, which the boys had arranged there at early daybreak, in testimony of their joy and gratitude for his kindness. Thus rapidly had these poor creatures advanced in moral feeling, religious sensibility, and good taste.

In the spring Mr. Wichern gives to each boy a patch of ground in the garden, which he is to call his own, and cultivate as he pleases. One of the boys began to erect a little hut of sticks and earth upon his plot, in which he might rest during the heat of the day, and to which he might retire when he wished to be alone. When it was all finished, it occurred to him to dedicate it to its use by religious ceremonies. Accordingly, he collected the boys together. The hut was adorned with wreaths of flowers ; a little table was placed in the centre, on which lay the open Bible, ornamented in the same manner. He then read with great seriousness the 14th, 15th, and 24th verses of the cxviiith Psalm :

“The Lord is my strength and my song, and is become my salvation.”

“The voice of rejoicing and salvation is heard in the tabernacles of the righteous.”

“This is the day which the Lord hath made. We will rejoice and be glad in it.”

After this, the exercises were concluded by singing and prayer. Another boy afterwards built him a hut, which was to be dedicated in a similar way ; but when the boys came together, they saw in it a piece of timber which belonged to the establishment, and ascertaining that it had

been taken without permission, they at once demolished the whole edifice, and restored the timber to its place. At the time of harvest, when they first entered the field to gather the potatoes, before commencing the work, they formed into a circle, and, much to the surprise of the superintendent, broke out together into the harvest hymn :

“Now let us all thank God.”

After singing this, they fell to their work with great cheerfulness and vigor.

I mention these instances, from numerous others which might be produced, to show how much may be done in reclaiming the most hopeless youthful offenders by a judicious application of the right means of moral influence. How short-sighted and destructive, then, is the policy which would exclude such influence from our public institutions ! The same effects have been produced by houses of reformation in our own country. I would mention, as one instance, the institution of Mr. Welles, in Massachusetts.

Now, laying aside all considerations of benevolence and of religious obligation, is it not for the highest good of the State, that these minds should be withdrawn from vice, and trained up to be enlightened and useful citizens, contributing a large share to the public wealth, virtue, and happiness ; rather than that they should come forward in life miserable criminals, of no use to themselves or the public, depredating on the property and violating the rights of the industrious citizens, increasing the public burdens by their crimes, endangering the well-being of society, and undermining our liberties ? They can be either the one or the other, according as we choose to educate them ourselves in the right way, or leave them to be educated by the thieves and drunkards in our streets, or the convicts in our prisons. The efforts made by some foreign nations to educate this part of their population, is a good lesson for us. All the schools and houses of reformation in Prussia, do not cost the government so much as old England is obliged to expend in prisons and constables for the regulation of that part of her popula-

tion, for which the government provides no schools but the hulks and the jails ; and I leave it to any one to say which arrangement produces the greatest amount of public happiness.

When I was in Berlin I went into the public prison, and visited every part of the establishment. At last I was introduced to a very large hall, which was full of children, with their books and teachers, and having all the appearance of a common Prussian school-room. "What !" said I, "is it possible that all these children are imprisoned here for crime ?" "O no," said my conductor, smiling at my simplicity ; "but if a parent is imprisoned for crime, and on that account his children are left destitute of the means of education, and liable to grow up in ignorance and crime, the government has them taken here, and maintained and educated for useful employment." The thought brought tears to my eyes. This was a new idea to me. I know not that it has ever been suggested in the United States ; but surely it is the duty of government, as well as its highest interest, when a man is paying the penalty of his crime in a public prison, to see that his unoffending children are not left to suffer, and to inherit their father's vices. Surely it would be better for the child, and *cheaper*, as well as better, for the State. Let it not be supposed that a man would go to prison for the sake of having his children taken care of, for they who go to prison usually have little regard for their children ; and, if they had, discipline like that of the Berlin prison would soon sicken them of such a bargain.

Where education is estimated according to its real value, people are willing to expend money for the support of schools ; and, if necessary, to deny themselves some physical advantages for the sake of giving their children the blessings of moral and intellectual culture. In the government of Baden, four per cent. of all the public expense is for education. They have a school, with an average of two or three well-qualified teachers, to every three miles of territory, and every one hundred children ; and that, too, when the people are so poor

that they can seldom afford any other food than dry barley-bread, and a farmer considers it a luxury to be able to allow his family the use of butter-milk three or four times a year. In Prussia, palaces and convents are every where turned into houses of education ; and accommodations originally provided for princes and bishops are not considered too good for the schoolmaster and his pupils. But, though occupying palaces, they have no opportunity to be idle or luxurious. Hard labor and frugal living are every where the indispensable conditions to a teacher's life, and I must say that I have no particular wish that it should be otherwise ; for it is only those who are willing to work hard and live frugally, that ever do much good in such a world as this.

I pass now to the consideration of a question of the deepest interest to us all, and that is, Can the common schools in our State be made adequate to the wants of our population ? I do not hesitate to answer this question decidedly in the affirmative ; and to show that I give this answer on good grounds, I need only to state the proper object of education, and lay before you what is actually now done towards accomplishing this object in the common schools of Prussia and Wirtemberg.

What is the proper object of education ? The proper object of education is a thorough developement of all the intellectual and moral powers—the awakening and calling forth of every talent that may exist, even in the remotest and obscurest corner of the State, and giving it a useful direction. A system that will do this, and such a system only, do I consider adequate to the wants of our population ; such a system, and such a system only, can avert all the evils and produce all the benefits which our common schools were designed to avert and produce. True, such a system must be far more extensive and complete than any now in operation among us—teachers must be more numerous, skilful, persevering, and self-denying—parents must take greater interest in the schools, and do more for their support—and the children must attend punctually and regularly, till the whole prescribed course is completed. All this can be done, and I hope will be

done ; and to show that the thing is really practicable, I now ask your attention to the course of instruction in the common schools of Prussia and Wirtemberg, and other European States, which have done the most in the matter of public instruction.

COURSE OF INSTRUCTION IN THE COMMON SCHOOLS OF PRUSSIA AND WIRTEMBERG.

THE whole course comprises eight years, and includes children from the ages of six to fourteen ; and it is divided into four parts, of two years each. It is a first principle, that the children be well accommodated as to house and furniture. The school-room must be well constructed, the seats convenient, and the scholars made comfortable, and kept interested. The younger pupils are kept at school but four hours in the day—two in the morning and two in the evening, with a recess at the close of each hour. The older, six hours, broken by recesses as often as is necessary. Most of the school-houses have a bathing-place, a garden, and a mechanic's shop attached to them, to promote the cleanliness and health of the children, and to aid in mechanical and agricultural instruction. It will be seen by the schedule which follows, that a vast amount of instruction is given during these eight years ; and lest it should seem that so many branches must confuse the young mind, and that they must necessarily be but partially taught, I will say, in the outset, that the industry, skill, and energy of teachers regularly trained to their business, and depending entirely upon it ; the modes of teaching ; the habit of always finishing whatever is begun ; the perfect method which is preserved ; the entire punctuality and regularity of attendance on the part of the scholars ; and other things of this kind, facilitate a rapidity and exactness of acquisition and discipline, which may well seem incredible to those who have never witnessed it.

The greatest care is taken that acquisition do not go beyond discipline ; and that the taxation of mind be kept entirely and clearly within the constitutional capacity of

mental and physical endurance. The studies must never weary, but always interest ; the appetite for knowledge must never be cloyed, but be kept always sharp and eager. These purposes are greatly aided by the frequent interchange of topics, and by lively conversational exercises. Before the child is even permitted to learn his letters, he is under conversational instruction, frequently for six months or a year ; and then a single week is sufficient to introduce him into intelligible and accurate plain reading.

Every week is systematically divided, and every hour appropriated. The scheme for the week is written on a large sheet of paper, and fixed in a prominent part of the school-room, so that every scholar knows what his business will be for every hour in the week ; and the plan thus marked out is rigidly followed. As a specimen, I present, in Appendix D., a study-sheet, given me by Dr. Diesterweg, of Berlin, and which was the plan for his school when I visited it, in September, 1836.

Through all the parts of the course there are frequent reviews and repetitions, that the impressions left on the mind may be distinct, lively, and permanent. The exercises of the day are always commenced and closed with a short prayer ; and the Bible and hymn-book are the first volumes put into the pupils' hands ; and these books they always retain and keep in constant use during the whole progress of their education.

The general outline of the eight years' course is nearly as follows :

I. *First part, of two years, including children from six to eight years old—four principal branches, namely :*

1. Logical exercises, or oral teaching in the exercise of the powers of observation and expression, including religious instruction and the singing of hymns.

2. Elements of reading.

3. Elements of writing.

4. Elements of number, or arithmetic.

II. *Second part, of two years, including children from eight to ten years old—seven principal branches, namely :*

1. Exercises in reading.
2. Exercises in writing.
3. Religious and moral instruction, in select Bible narratives.
4. Language, or grammar.
5. Numbers, or arithmetic.
6. Doctrine of space and form, or geometry.
7. Singing by note, or elements of music.

III. *Third part, of two years, including children from ten to twelve years old—eight principal branches, namely :*

1. Exercises in reading and elocution.
2. Exercises in ornamental writing, preparatory to drawing.
3. Religious instruction in the connected Bible history.
4. Language, or grammar, with parsing.
5. Real instruction, or knowledge of Nature and the external world, including the first elements of the sciences and the arts of life—of geography and history.
6. Arithmetic, continued through fractions and the rules of proportion.
7. Geometry—doctrine of magnitudes and measures.
8. Singing, and science of vocal and instrumental music.

IV. *Fourth part, of two years, including children from twelve to fourteen years old—six principal branches, namely :*

1. Religious instruction in the religious observation of Nature ; the life and discourses of Jesus Christ ; the history of the Christian religion, in connexion with the contemporary civil history ; and the doctrines of Christianity.
2. Knowledge of the world, and of mankind, including civil society, elements of law, agriculture, mechanic arts, manufactures, &c.
3. Language, and exercises in composition.
4. Application of arithmetic and the mathematics to the business of life, including surveying and civil engineering.
5. Elements of drawing.
6. Exercises in singing, and the science of music.

We subjoin a few specimens of the mode of teaching under several of the above divisions.

I. *First part—children from six to eight years of age.*

1. Conversations between the teacher and pupils, intended to exercise the powers of observation and expression.

The teacher brings the children around him, and engages them in familiar conversation with himself. He generally addresses them all together, and they all reply simultaneously ; but, whenever necessary, he addresses an individual, and requires the individual to answer alone. He first directs their attention to the different objects in the school-room, their position, form, color, size, materials of which they are made, &c., and requires precise and accurate descriptions. He then requires them to notice the various objects that meet their eye in the way to their respective homes ; and a description of these objects, and the circumstances under which they saw them, will form the subject of the next morning's lesson. Then the house in which they live, the shop in which their father works, the garden in which they walk, &c., will be the subject of the successive lessons ; and in this way, for six months or a year, the children are taught to study *things*, to use their own powers of observation, and speak with readiness and accuracy, before books are put into their hands at all. A few specimens will make the nature and utility of this mode of teaching perfectly obvious.

In a school in Berlin, a boy has assigned him for a lesson, a description of the remarkable objects in certain directions from the school-house, which is situated in Little Cathedral street. He proceeds as follows : “ When I come out of the school-house into Little Cathedral street, and turn to the right, I soon pass on my left hand the Maria Place, the Gymnasium, and the Anklam Gate. When I come out of Little Cathedral street, I see on my left hand the White Parade Place, and within that, at a little distance, the beautiful statue of Frederick the Great, King of Prussia. It is made of white marble, and stands

on a pedestal of variegated marble, and is fenced in with an iron railing. From here, I have on my right a small place, which is a continuation of the Parade Place ; and at the end of this, near the wall, I see St. Peter's Church, or the Wall-street Church, as it is sometimes called. This church has a green yard before it, planted with trees. which is called the Wall Church-Yard. St. Peter's Church is the oldest church in the city ; it has a little round tower, which looks green, because it is mostly covered with copper, which is made green by exposure to the weather. When I go out of the school-house to the lower part of Little Cathedral street, by the Coal-market, through Shoe-street and Carriage-street, I come to the Castle. The Castle is a large building, with two small towers, and is built around a square yard, which is called the Castle-yard. In the Castle there are two churches, and the King and his Ministers of State, and the Judges of the Supreme Court, and the Consistory of the Church, hold their meetings there. From the Coal-market, I go through Shoe-street to the Hay-market, and adjoining this is the New-market, which was formed after St. Nicholas's Church was burnt, which formerly stood in that place. Between the Hay-market and the New-market is the City Hall, where the officers and magistrates of the city hold their meetings."

If a garden is given to a class for a lesson, they are asked the size of the garden ; its shape, which they may draw on a slate with a pencil ; whether there are trees in it ; what the different parts of a tree are ; what parts grow in the spring, and what parts decay in autumn, and what parts remain the same throughout the winter ; whether any of the trees are fruit-trees ; what fruits they bear ; when they ripen ; how they look and taste ; whether the fruit be wholesome or otherwise ; whether it is prudent to eat much of it ; what plants and roots there are in the garden, and what use is made of them ; what flowers there are, and how they look, &c. The teacher may then read them the description of the garden of Eden in the second chapter of Genesis—sing a hymn with them, the imagery of which is taken from the fruits and blos-

soms of a garden, and explain to them how kind and bountiful God is, who gives us such wholesome plants and fruits, and such beautiful flowers for our nourishment and gratification.

The external heavens also make an interesting lesson. The sky—its appearance and color at different times ; the clouds—their color, their varying form and movements ; the sun—its rising and setting, its concealment by clouds, its warming the earth and giving it life and fertility, its great heat in summer, and the danger of being exposed to it unprotected ; the moon—its appearance by night, full, gibbous, horned ; its occasional absence from the heavens ; the stars—their shining, difference among them, their number, distance from us, &c. In this connexion the teacher may read to them the eighteenth and nineteenth Psalms, and other passages of Scripture of that kind, sing with them a hymn celebrating the glory of God in the creation, and enforce the moral bearing of such contemplations by appropriate remarks. A very common lesson is, the family and family duties—love to parents, love to brothers and sisters—concluding with appropriate passages from Scripture, and singing a family hymn.

2. Elements of reading.

After a suitable time spent in the exercises above described, the children proceed to learn the elements of reading. The first step is to exercise the organs of sound till they have perfect command of their vocal powers ; and this, after the previous discipline in conversation and singing, is a task soon accomplished. They are then taught to utter distinctly all the vowel-sounds. The characters or letters representing these sounds are then shown and described to them, till the form and power of each are distinctly impressed upon their memories. The same process is then gone through in respect to diphthongs and consonants. Last of all, after having acquired a definite and distinct view of the different sounds, and of the forms of the letters which respectively represent these sounds, they are taught the names of these letters, with the distinct understanding that the *name* of a letter and the *power* of a letter are two very different things.

They are now prepared to commence reading. The letters are printed in large form, on square cards; the class stands up before a sort of rack; the teacher holds the cards in his hand, places one upon the rack, and a conversation of this kind passes between him and his pupils: What letter is that? H. He places another on the rack. What letter is that? A. I now put these two letters together, thus, (moving the cards close together,) HA. What sound do these two letters signify? Ha. There is another letter. What letter is that? (putting it on the rack.) R. I now put this third letter to the other two, thus, HAR. What sound do the three letters make? Har. There is another letter. What is it? D. I join this letter to the other three, thus, HARD. What do they all make? Hard. Then he proceeds in the same way with the letters F-I-S-T; joins these four letters to the preceding four, HARD-FIST, and the pupils pronounce, *Hard-fist*. Then with the letters E and D, and joins these two to the preceding eight, and the pupils pronounce *Hard-fisted*. In this way they are taught to read words of any length—for you may easily add to the above, N-E-S-S, and make *Hard-fistedness*)—the longest as easily as the shortest; and in fact they learn their letters; they learn to read words of one syllable and of several syllables, and to read in plain reading, by the same process, at the same moment. After having completed a sentence, or several sentences, with the cards and rack, they then proceed to read the same words and sentences in their spelling-books.

3. Elements of writing.

The pupils are first taught the right position of the arms and body in writing, the proper method of holding the pen, &c.; and are exercised on these points till their habits are formed correctly. The different marks used in writing are then exhibited to them, from the simple point or straight line, to the most complex figure. The variations of form and position which they are capable of assuming, and the different parts of which the complex figures are composed, are carefully described, and the student is taught to imitate them, beginning with the most

simple; then the separate parts of the complex, then the joining of the several parts to a whole, with his pencil and slate. After having acquired facility in this exercise, he is prepared to write with his ink and paper. The copy is written upon the black-board; the paper is laid before each member of the class, and each has his pen ready in his hand, awaiting the word of his teacher. If the copy be the simple point, or line *1*, the teacher repeats the syllable *one*, *one*, slowly at first, and with gradually-increasing speed, and at each repetition of the sound the pupils write. In this way they learn to make the mark both correctly and rapidly. If the figure to be copied consist of two strokes, (thus, *1*), the teacher pronounces *one*, *two*—*one*, *two*, slowly at first, and then rapidly, as before; and the pupils make the first mark, and then the second, at the sound of each syllable, as before. If the figure consist of three strokes, (thus, *1*), the teacher pronounces *one*, *two*, *three*, and the pupils write as before. So when they come to make letters—the letter *a* has five strokes, thus, *a*. When that is the copy, the teacher says, deliberately, *one*, *two*, *three*, *four*, *five*, and at the sound of each syllable the different strokes composing the letter are made; the speed of utterance is gradually accelerated, till finally the *a* is made very quickly, and at the same time neatly. By this method of teaching, a plain, neat, and quick hand is easily acquired.

4. Elements of number, or arithmetic.

In this branch of instruction I saw no improvements in the mode of teaching not already substantially introduced into the best schools of our own country. I need not, therefore, enter into any details respecting them, excepting so far as to say that the student is taught to demonstrate, and perfectly to understand, the reason and nature of every rule before he uses it.

(See *Arithmetics*, by Colburn, Ray, Miss Beecher, and others.)

II. *Second part—children from eight to ten years of age.*

1. Exercises in reading.

The object of these exercises, in this part of the course, is to acquire the habit of reading with accuracy and readiness, with due regard to punctuation, and with reference to orthography. Sometimes the whole class read together, and sometimes an individual by himself, in order to accustom them to both modes of reading, and to secure the advantages of both. The sentence is first gone through with in the class, by distinctly spelling each word as it occurs ; then by pronouncing each word distinctly without spelling it ; a third time by pronouncing the words and mentioning the punctuation-points as they occur. A fourth time, the sentence is read with the proper pauses indicated by the punctuation-points, without mentioning them. Finally, the same sentence is read with particular attention to the intonations of the voice. Thus one thing is taken at a time, and pupils must become thorough in each as it occurs, before they proceed to the next. One great benefit of the class reading together is, that each individual has the same amount of exercise as if he were the only one under instruction, his attention can never falter, and no part of the lesson escapes him. A skilful teacher, once accustomed to this mode of reading, can as easily detect any fault, mispronunciation, or negligence, in any individual, as if that individual were reading alone.

The process is sometimes shortened, and the sentence read only three times, namely—"according to the words, according to the punctuation, according to the life."

2. Exercises in writing.

The pupils proceed to write copies in joining-hand, both large and small, the principles of teaching being essentially as described in the first part of the course. The great object here is, to obtain a neat, swift, business hand. Sometimes, without a copy, they write from the dictation of the teacher ; and in most cases instruction in orthography and punctuation is combined with that in penmanship. They are also taught to make and mend their own pens, and in doing this to be economical of their quills.

3. Religious and moral instruction in select Bible narratives.

In this branch of teaching the methods are various, and the teacher adopts the method best adapted, in his judgment, to the particular circumstances of his own school, or to the special objects which he may have in view with a particular class. Sometimes he calls the class around him, and relates to them, in his own language, some of the simple narratives of the Bible, or reads it to them in the words of the Bible itself, or directs one of the children to read it aloud ; and then follows a friendly, familiar conversation between him and the class respecting the narrative ; their little doubts are proposed and resolved, their questions put and answered, and the teacher unfolds the moral and religious instruction to be derived from the lesson, and illustrates it by appropriate quotations from the didactic and preceptive parts of the Scripture. Sometimes he explains to the class a particular virtue or vice—a truth or a duty ; and after having clearly shown what it is, he takes some Bible narrative which strongly illustrates the point in discussion, reads it to them, and directs their attention to it, with special reference to the preceding narrative.

A specimen or two of these different methods will best show what they are :

(a) Read the narrative of the birth of Christ, as given by Luke, ii. 1–20. Observe, Christ was born for the salvation of men, so also for the salvation of children. Christ is the children's friend. Heaven rejoices in the good of men. Jesus, though so great and glorious, makes his appearance in a most humble condition. He is the teacher of the poor, as well as of the rich.

With these remarks compare other texts of the Bible.

Jno. iii. 16. "For God so loved the world that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life."

1 Jno. iv. 9. "In this was manifested the love of God towards us ; because that God sent his only begotten Son into the world, that we might live through him."

Mark x. 14, 15. "But when Jesus saw it he was much displeased, and said unto them, Suffer little children to come unto me, for of such is the kingdom of God. Verily I say unto you, Whosoever shall not receive the kingdom of God as a little child, he shall not enter therein."

And the lesson is concluded with singing a Christmas hymn.

Jesus feeds five thousand men : Jno. vi. 1-14.

God can bless a little so that it will do great good.

Economy suffers nothing to be lost—other texts : Ps. cxlv. 15, 16.

“The eyes of all wait upon thee ; and thou givest them their meat in due season.”

“Thou openest thy hand, and satisfiest the desire of every living thing.”

Matt. vi. 31-33. “Therefore take no thought, saying, What shall we eat? or, What shall we drink? or, Wherewithal shall we be clothed? (for after all these things do the Gentiles seek :) for your heavenly Father knoweth that ye have need of all these things. But seek ye first the kingdom of God, and his righteousness ; and all these things shall be added unto you.”

Story of Cain and Abel. Gen. iv. 1-16.

Remarks.—Two men may do the same thing externally, and yet the merit of their acts be very different. God looks at the heart. Be careful not to cherish envy or ill-will in the heart. You know not to what crimes they may lead you. Remorse and misery of the fratricide—other texts. Matt. xv. 19. Heb. xi. 4. 1 Jno. iii. 12. Job xxxiv. 32.

“For out of the heart proceed evil thoughts, murders, adulteries, fornications, thefts, false witness, blasphemies.”

“By faith Abel offered unto God a more excellent sacrifice than Cain, by which he obtained witness, that he was righteous, God testifying of his gifts : and by it he, being dead, yet speaketh.”

“Not as Cain, who was of that wicked one, and slew his brother. And wherefore slew he him? Because his own works were evil, and his brother’s righteous.”

Story of Jesus in the temple. Luke ii. 41-52.

Jesus in his childhood was very fond of learning—(he heard and asked questions.) God’s word was his delight, he understood what he heard and read—(men were astonished at his understanding and answers.) He carefully obeyed his parents—(he went with them and was subject to them.) And as he grew up his good conduct endeared him to God and man. Other texts. Eph. vi. 1-4. Prov. iii. 1-4.

“Children ! obey your parents in the Lord ; for this is right. Honor thy father and mother, (which is the first commandment with promise,) that it may be well with thee, and thou mayest live long on the earth. And, ye fathers ! provoke not your children to wrath, but bring them up in the nurture and admonition of the Lord.”

“My son, forget not my law ; but let thine heart keep my commandments : For length of days, and long life, and peace, shall they add to thee. Let not mercy and truth forsake thee : bind them about thy neck ; write them upon the table of thine heart : So shalt thou find favor and good understanding in the sight of God and man.”

On the other mode of teaching, the teacher, for example, states the general truth, that God protects and rewards the good, and punishes the bad. In illustration of this he reads to them the narrative of Daniel in the lions' den, and the death which overtook his wicked accusers. Dan. vi. In illustration of the same truth, the escape of Peter, and the miserable death of his persecutor, Herod, may be read. Acts xii.

The teacher may impress upon the mind of his class, that diligence, scrupulous fidelity, and conscientious self-control, are the surest guarantees of success in life ; and, in illustration of the statement, read the narrative of Joseph's conduct in his master's house in Egypt, and in the prison, and the results of it. Gen. xxxix. So, also, various incidents in the life of Jesus may be used to great advantage in illustrating different virtues.

It is recommended that the teacher employ, in his instructions, the translation of the Scriptures in general use among the people ; but that he occasionally take the original Scriptures and read to the children, in his own translation, and sometimes use simple translations from different authors, that children may early learn to notice the diversities in different faithful translations, and see what they really amount to.

It is scarcely necessary to observe, that a teacher who understands his business, and is faithful to his trust, will scrupulously abstain from sectarian peculiarities, or from casting odium on the tenets of any of the Christian denominations. A man who has not magnanimity or enlargement of mind enough for this, is not fit to be employed as a teacher, even in the humblest branches of knowledge.

4. Language, or grammar.

The knowledge of the native tongue, the ability to use it with correctness, facility, and power, is justly regarded as one of the most important branches of common-school instruction. It is the principal object of the *logical exercises*, or, as they may be justly termed, *the exercises in thinking and speaking*, already described as the first subject of study in the first part of the course, before the child has begun to use his book at all.

In this second part of the course, grammar is taught directly and scientifically, yet by no means in a dry and technical manner. On the contrary, technical terms are carefully avoided, till the child has become familiar with the nature and use of the things designated by them, and he is able to use them as the names of ideas which have a definite existence in his mind, and not as awful sounds, dimly shadowing forth some mysteries of science into which he has no power to penetrate.

The first object is to illustrate the different parts of speech, such as the noun, the verb, the adjective, the adverb ; and this is done by engaging the pupil in conversation, and leading him to form sentences in which the particular part of speech to be learned shall be the most important word, and directing his attention to the nature and use of the word in the place where he uses it. For example, let us suppose the nature and use of the adverb are to be taught. The teacher writes upon the black-board the words " here, there, near," &c. He then says, " Children, we are all together in this room—by which of the words on the black-board can you express this ?" *Children*—" We are all *here*." *Teacher*—" Now look out of the window and see the church ; what can you say of the church with the second word on the black-board ?" *Children*—" The church is *there*." *Teacher*—" The distance between us and the church is not great ; how will you express this by a word on the black-board ?" *Children*—" The church is *near*." The fact that these different words express the same sort of relations is then explained, and, accordingly, that they belong to the same class, or are the same part of speech. The

variations of these words are next explained. "Children, you say the church is near, but there is a shop between us and the church; what will you say of the shop?" *Children*—"The shop is *nearer*." *Teacher*—"But there is a fence between us and the shop. Now when you think of the distance between us, the shop, and the fence, what will you say of the fence?" *Children*—"The fence is *nearest*." So of other adverbs. "The lark sings *well*. Compare the singing of the lark with that of the canary-bird. Compare the singing of the nightingale with that of the canary-bird." After all the different sorts of adverbs and their variations have in this way been illustrated, and the pupils understand that all words of this kind are called *adverbs*, the definition of the adverb is given as it stands in the grammar, and the book is put into their hands to study the chapter on this topic. In this way the pupil understands what he is doing at every step of his progress, and his memory is never burdened with mere names, to which he can attach no definite meaning.

The mode of teaching the subsequent branches is founded on the same general principles, and it may not be necessary to give particular examples.

5. Numbers, or arithmetic.

6. Doctrine of space and form, or geometry.

7. Singing by note, or elements of music.

The method of teaching music has already been successfully introduced into our own State, and whoever visits the schools of Messrs. Mason or Solomon, in Cincinnati, will have a much better idea of what it is than any description can give; nor will any one who visits these schools entertain a doubt that all children from six to ten years of age, who are capable of learning to read, are capable of learning to sing, and that this branch of instruction can be introduced into all our common schools with the greatest advantage, not only to the comfort and discipline of the pupils, but also to their progress in their other studies.

The students are taught from the black-board. The different sounds are represented by lines of different

lengths, by letters, by figures, and by musical notes ; and the pupils are thoroughly drilled on each successive principle before proceeding to the next.

III. *Third part, of two years—children from ten to twelve.*

1. Exercises in reading and elocution.

The object of these exercises, in this part of the course, is to accustom the pupils to read in a natural and impressive manner, so as to bring the full force of the sentiment on those to whom they read. They are examined in modulation, emphasis, and the various intonations, and they often read sentences from the black-board in which the various modulations are expressed by musical notes or curved lines.

The evils of drawling and monotone are prevented in the outset by the method of teaching, particularly the practice of the whole class reading together and keeping time. Short and pithy sentences, particularly the Book of Proverbs, are recommended as admirably adapted to exercises of this kind.

2. Ornamental writing, introductory to drawing.

The various kinds of ornamental letters are here practised upon, giving accuracy to the eye and steadiness to the hand, preparatory to skill in drawing, which comes into the next part of the course. The pupils also practise writing sentences and letters, with neatness, rapidity, and correctness.

3. Religious instruction in the connected Bible history.

The design here is to give to the student a full and connected view of the whole Bible history. For this purpose large tables are made out and hung before the students. These tables are generally arranged in four columns, the first containing the names of the distinguished men during a particular period of Bible history ; the second, the dates ; the third, a chronological register of events ; and the fourth, the particular passages of the Bible where the history of these persons and events may be found. With these tables before the pupils, the teacher himself,

in his own words, gives a brief conversational outline of the principal characters and events within a certain period, and then gives directions that the scriptural passages referred to be carefully read. After this is done, the usual recitation and examination take place. Some of the more striking narratives, such as the finding of Moses on the banks of the Nile; Abraham offering his son; the journey of the wise men to do homage to Christ; the crucifixion; the conversion of Paul, &c., are committed to memory in the words of the Bible, and the recitation accompanied with the singing of a hymn alluding to these events. The moral instruction to be derived from each historical event is carefully impressed by the teacher. The teacher also gives them a brief view of the history between the termination of the Old and the commencement of the New Testament, that nothing may be wanting to a complete and systematic view of the whole ground. Thus the whole of the historical part of the Bible is studied thoroughly, and systematically, and practically, without the least sectarian bias, and without a moment being spent on a single idea that will not be of the highest use to the scholar during all his future life.

4. Language and grammar.

There is here a continuation of the exercises in the preceding parts of the course, in a more scientific form, together with parsing of connected sentences, and writing from the dictation of the teacher, with reference to grammar, orthography, and punctuation. The same principle alluded to before, of avoiding technical terms till the things represented by those terms are clearly perceived, is here carefully adhered to. A single specimen of the manner in which the modes and tenses of the verb are taught, may be sufficient to illustrate my meaning. The teacher writes on the black-board a simple sentence, as, "The scholars learn well;" and asks the class what sort of a sentence it is. They reply that it is a direct statement of a fact. (Teach.) Put it in the form of a command. (Class.) Scholars, learn well! (Teach.) Put it in a question form. (Class.) Do the scholars learn well? (Teach.) Of a wish. (Class.) May the scholars

learn well! (Teach.) Of an exclamation. (Class.) How well the scholars learn! (Teach.) The conditional form. (Class.) If the scholars learn well; or, Should the scholars learn well. (Teach.) Of necessity. (Class.) The scholars must learn well. (Teach.) Of ability. (Class.) The scholars can learn well, &c. &c. They are then taught that the direct statement is called the indicative mode of the verb; the command, the imperative mode; the conditional, the subjunctive mode; the wish, the potential mode, &c. &c.—and after this the book is put into their hands, and they study their lesson as it stands. After this the different tenses of the several modes are taught in the same way.

5. Real instruction, or knowledge of Nature and the external world, including the first elements of the natural sciences, the arts of life, geography, and history. Instruction on this head is directed to the answering of the following questions, namely:

(a) What is man, as it respects his corporeal and intellectual nature?

Here come anatomy and physiology, so far as the structure of the human body is concerned, and the functions of its several parts.

Also the simple elements of mental philosophy. In this connexion appropriate texts of Scripture are quoted, as Gen. ii. 7. Ps. cxxxix. 14–16. An appropriate hymn is also sung.

“And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul.”

“I will praise thee; for I am fearfully and wonderfully made: marvellous are thy works; and that my soul knoweth right well. My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being imperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them.”

(b) What does man need for the preservation and cheerful enjoyment of life, as it respects his body and mind? For his body he needs *food*; the different kinds of food, and the mode of preparing them, are here brought to view; the unwholesomeness of some kinds of food; injurious-

ness of improper food ; cooking ; evils of gluttony. The different kinds of clothing and modes of preparing them ; what sort of dress is necessary to health ; folly and wickedness of vanity and extravagance. *Dwellings*—materials of which houses are constructed ; mode of constructing them ; different trades employed in their construction.

For the mind, man needs *society*—the family and its duties ; the neighborhood and its duties Intellectual, moral, and religious cultivation ; the school and its duties ; the church and its duties. For the body and mind both, he needs *security* of person and property—the government ; the legislature ; the courts, &c.

(c) Where and how do men find the means to supply their wants, and make themselves comfortable and happy in this life ?

The vegetable, the mineral, and the animal kingdoms are here brought to view, for materials ; together with agriculture and manufactures, as the means of converting these materials to our use. Geography, with special reference to the productions of countries, and their civil, literary, and religious institutions ; towns, their organization and employments. Geography is sometimes taught by blank charts, to which the students are required to affix the names of the several countries, rivers, mountains, principal towns, &c., and then state the productions and institutions for which they are remarkable. Sometimes the names of countries, rivers, &c., are given, and the pupil is required to construct an outline chart of their localities.

In respect to all the above points, the native country is particularly studied ; its capabilities, its productions, its laws, its institutions, its history, &c., are investigated, with especial reference to its ability of supplying the physical, social, and moral wants of its inhabitants. Under this head the pupils are taught to appreciate their native country, to venerate and love its institutions, to understand what is necessary to their perfection, and to imbibe a spirit of pure and generous patriotism. It is scarcely necessary to add, that all the instruction under this fifth head is confined to the fundamental and simplest principles of the several branches referred to.

6. Arithmetic, continued through fractions and the rules of proportion.
7. Geometry—doctrine of magnitudes and measures.
8. Singing, and science of vocal and instrumental music.

IV. *Fourth part, of two years—children from twelve to fourteen.*

1. Religious instruction, in the religious observation of Nature, the life and discourses of Jesus Christ, the history of the Christian religion, in connexion with the contemporary civil history, and the principal doctrines of the Christian system.

The first topic of instruction mentioned under this head is one of peculiar interest and utility. The pupils are taught to observe, with care and system, the various powers and operations of Nature, and to consider them as so many illustrations of the wisdom, power, and goodness of the Creator ; and at each lesson they are directed to some appropriate passage of the Bible, which they read and commit to memory : and thus the idea is continually impressed on them, that the God of Nature and the God of the Bible are one and the same Being.

For example, as introductory to the whole study, the first chapter of Genesis, together with some other appropriate passage of Scripture, as the 147th Psalm, or the 38th chapter of Job, may be read and committed to memory. The surface of the earth, as illustrating the power and wisdom of God, may be taken as a lesson. Then the varieties of surface, as mountains, valleys, oceans and rivers, continents and islands, the height of mountains, the breadth of oceans, the length of rivers, remarkable cataracts, extended caverns, volcanoes, tides, &c., may be taken into view, and the teacher may impress upon the class the greatness, power, and intelligence necessary for such a creation. The whole is fortified by the application of such a passage as Psalm civ. 1–13.

“Bless the Lord, O my soul ! O Lord my God ! thou art very great ; thou art clothed with honor and majesty. Who coverest thyself with light as with a garment : who stretchest out the heavens like a curtain :

who layeth the beams of his chambers in the waters : who maketh the clouds his chariot : who walketh upon the wings of the wind : who maketh his angels spirits ; his ministers a flaming fire. Who laid the foundations of the earth, that it should not be removed for ever. Thou coveredst it with the deep as with a garment : the waters stood above the mountains. At thy rebuke they fled ; at the voice of thy thunder they hasted away. They go up by the mountains ; they go down by the valleys unto the place which thou hast founded for them. Thou hast set a bound that they may not pass over ; that they turn not again to cover the earth. He sendeth the springs into the valleys, which run among the hills. They give drink to every beast of the field ; the wild asses quench their thirst. By them shall the fowls of the heaven have their habitation, which sing among the branches. He watereth the hills from his chambers : the earth is satisfied with the fruit of thy works."

"O Lord, how manifold are thy works ! in wisdom hast thou made them all : the earth is full of thy riches. So is this great and wide sea, wherein are things creeping innumerable, both small and great beasts. There go the ships : there is that leviathan, whom thou hast made to play therein."

The fruitfulness and beauty of the earth, as illustrating the wisdom and goodness of God, may serve as another lesson. Here may be exhibited the beauty and variety of the plants and flowers with which the earth is adorned—the manner of their growth and self-propagation, their utility to man and beast, their immense number and variety, their relations to each other as genera and species ; trees and their varieties, their beauty and utility, their timber and their fruit ; and, in connexion with this lesson, Psalm civ. 14–34 may be committed to memory.

"He causeth the grass to grow for the cattle, and herb for the service of man : that he may bring forth food out of the earth ; and wine that maketh glad the heart of man, and oil to make his face to shine, and bread which strengtheneth man's heart. The trees of the Lord are full of sap ; the cedars of Lebanon, which he hath planted ; where the birds make their nests : as for the stork, the fir-trees are her house. The high hills are a refuge for the wild goats ; and the rocks for the conies. He appointeth the moon for seasons : the sun knoweth his going down. Thou makest darkness, and it is night : wherein all the beasts of the forest do creep forth. The young lions roar after their prey, and seek their meat from God. The sun ariseth, they gather themselves together, and lay them down in their dens. Man goeth forth unto his work and to his labor until the evening."

"These wait all upon thee ; that thou mayest give them their meat in due season. That thou givest them they gather ; thou openest thine hand, they are filled with good. Thou hidest thy face, they are troubled : thou takest away their breath, they die, and return to their dust.

Thou sendest forth thy Spirit, they are created : and thou renewest the face of the earth. The glory of the Lord shall endure for ever : the Lord shall rejoice in his works. He looketh on the earth, and it trembleth : he toucheth the hills, and they smoke. I will sing unto the Lord as long as I live : I will sing praise to my God while I have my being. My meditation of him shall be sweet : I will be glad in the Lord."

In like manner, the creation and nourishment, the habits and instincts of various animals may be contemplated, in connexion with Proverbs vi. 6-8 ; Psalm civ. 17-22 ; Proverbs xxx. 24-31. Gen. i. 20-24 ; Psalm cxlv. 15, 16.

"Go to the ant, thou sluggard ! consider her ways, and be wise : Which having no guide, overseer, or ruler, provideth her meat in the summer, and gathereth her food in the harvest."

"There be four things which are little on the earth, but they are exceeding wise : the ants are a people not strong, yet they prepare their meat in the summer ; the conies are but a feeble folk, yet make they their houses in the rocks ; the locusts have no king, yet go they forth all of them by bands ; the spider taketh hold with her hands, and is in kings' palaces. There be three things which go well, yea, four are comely in going : a lion, which is strongest among beasts, and turneth not away for any ; a greyhound ; a he-goat also ; and a king, against whom there is no rising up."

"And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind : and it was so. And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind : and God saw that it was good."

"The eyes of all wait upon thee ; and thou givest them their meat in due season. Thou openest thine hand, and satisfiest the desire of every living thing. The Lord is righteous in all his ways, and holy in all his works."

The phenomena of light and color, the nature of the rainbow, &c., may make another interesting lesson, illustrating the unknown forms of beauty and glory which exist in the Divine Mind, and which He may yet develope in other and still more glorious worlds ; in connexion with Gen. i. 3, 5, 9, 13, 14, and other passages of like kind.

So the properties of the air, wind, and storm, Job xxviii. 25 ; xxxviii. 33, 34, 35. Psalm cxlviii. 8.

"Knowest thou the ordinances of heaven ? canst thou set the dominion thereof in the earth ? Canst thou lift up thy voice to the clouds, that

abundance of waters may cover thee? Canst thou send lightnings, that they may go, and say unto thee, Here we are? Who hath put wisdom in the inward parts? or who hath given understanding to the heart? Who can number the clouds in wisdom? or who can stay the bottles of heaven?"

Then the heavens, the sun, moon, planets, fixed stars, and comets, the whole science of astronomy, so far as it can be introduced with advantage into common schools, can be contemplated in the same way. The enlightening, elevating, and purifying moral influence of such a scheme of instruction, carried through the whole system of Nature, must be clearly obvious to every thinking mind; and its utility, considered merely with reference to worldly good, is no less manifest.

The second topic of religious instruction is more exclusively scriptural. The life of Christ, and the history of the apostles, as given in the New Testament, are chronologically arranged, and tables formed as before. (III. 3.) The discourses of Christ are examined and explained in their chronological arrangement, and in the same way the discourses and epistles of the apostles. The history of Christianity, in connexion with the contemporary civil history, is taught in a series of conversational lectures. To conclude the whole course of religious instruction, a summary of the Christian doctrine is given in the form of some approved catechism.

2. Knowledge of the world and of mankind, including civil society, constitutional law, agriculture, mechanic arts, manufactures, &c.

This is a continuation and completion, in a more systematic form, of the instruction commenced in III. 5. The course begins with the family, and the first object is to construct a habitation. The pupil tells what materials are necessary for this purpose, where they are to be found, how brought together and fitted into the several parts of the building. The house must now be furnished. The different articles of furniture and their uses are named in systematic order, the materials of which they are made, and the various trades employed in making them are enumerated. Then comes the garden, its tools and products,

and whatever else is necessary for the subsistence and physical comfort of a family. Then the family duties and virtues ; parental and filial obligation and affection ; rights of property ; duties of neighborhoods ; the civil relations of society ; the religious relations of society ; the State, the father-land, &c. ; finally, geography, history, and travels. Books of travels are compiled expressly for the use of schools, and are found to be of the highest interest and utility.

3. Language, and exercises in composition.

The object here is to give the pupils a perfect command of their native tongue, and ability to use it on all occasions with readiness and power. The first exercises are on simple questions, such as—"Why ought children to love and obey their parents?"—or they are short descriptions of visible objects, such as a house, a room, a garden, &c. There are also exercises on the various forms of expressing the same idea, as, "The sun enlightens the earth." "The earth is enlightened by the sun." "The sun gives light to the earth." "The earth receives light from the sun." "The sun is the source of light to the earth." "The sun sends out its rays to enlighten the earth." "The earth is enlightened by rays sent out from the sun," &c. There are exercises also of the same sort on metaphors and other figures of speech. Familiar letters are then written, and short essays on themes such as may be furnished by texts from the Book of Proverbs, and other sentences of the kind ; and thus gradual advancement is made to all the higher and graver modes of composition.

4. Application of arithmetic and the mathematics to the business of life, including surveying, civil engineering, &c.

The utility of this branch of instruction, and the mode of it, after what has already been said, are probably too obvious to need any further illustration.

5. Elements of drawing.

For this the pupils have already been prepared by the exercises in ornamental writing, in the previous part of the course. They have already acquired that accuracy

of sight and steadiness of hand which are among the most essential requisites to drawing well. The first exercises are in drawing lines, and the most simple mathematical figures, such as the square, the cube, the triangle, the parallelogram ; generally from wooden models, placed at some little distance on a shelf, before the class. From this they proceed to architectural figures, such as doors, windows, columns, and façades. Then the figures of animals, such as a horse, a cow, an elephant—first from other pictures, and then from Nature. A plant, a rose, or some flower is placed upon a shelf, and the class make a picture of it. From this they proceed to landscape painting, historical painting, and the higher branches of the art, according to their time and capacity. All learn enough of drawing to use it in the common business of life, such as plotting a field, laying out a canal, or drawing the plan of a building ; and many attain to a high degree of excellence.

6. Exercises in singing, and the science of music.

The instructions of the previous parts are extended as far as possible, and include singing and playing at sight, and the more abstruse and difficult branches of the science and art of music.

CHARACTER OF THE SYSTEM.

THE striking features of this system, even in the hasty and imperfect sketch which my limits allow me to give, are obvious even to superficial observation. No one can fail to observe its great completeness, both as to the number and kind of subjects embraced in it, and as to its adaptedness to develope every power of every kind, and give it a useful direction. What topic, in all that is necessary for a sound business education, is here omitted ? I can think of nothing, unless it be one or two of the modern languages, and these are introduced wherever it is necessary, as will be seen in the study-sheet of Dr. Diesterweg's seminary, inserted in the Appendix to this Report. I have not taken the course precisely as it exists in any one school, but have combined, from an

investigation of many institutions, the features which I suppose would most fairly represent the whole system. In the Rhinish provinces of Prussia, in a considerable part of Bavaria, Baden, and Wirtemberg, French is taught as well as German ; in the schools of Prussian Poland, German and Polish are taught ; and even English, in the Russian schools of Cronstadt and Archangel, where so many English and American merchants resort for the purposes of trade. Two languages can be taught in a school quite as easily as one, provided the teacher be perfectly familiar with both, as any one may see by visiting Mr. Solomon's school in Cincinnati, where all the instruction is given both in German and English.

What faculty of mind is there that is not developed in the scheme of instruction sketched above ? I know of none. The perceptive and reflective faculties, the memory and the judgement, the imagination and the taste, the moral and religious faculty, and even the various kinds of physical and manual dexterity, all have opportunity for development and exercise. Indeed, I think the system, in its great outlines, as nearly complete as human ingenuity and skill can make it ; though undoubtedly some of its arrangements and details admit of improvement ; and some changes will of course be necessary in adapting it to the circumstances of different countries.

The entirely practical character of the system is obvious throughout. It views every subject on the practical side, and in reference to its adaptedness to use. The dry, technical, abstract parts of science are not those first presented ; but the system proceeds, in the only way which Nature ever pointed out, from practice to theory, from facts to demonstrations. It has often been a complaint in respect to some systems of education, that the more a man studied, the less he knew of the actual business of life. Such a complaint cannot be made in reference to this system, for, being intended to educate for the actual business of life, this object is never for a moment lost sight of.

Another striking feature of the system is its moral and religious character. Its morality is pure and elevated,

its religion entirely removed from the narrowness of sectarian bigotry. What parent is there, loving his children, and wishing to have them respected and happy, who would not desire that they should be educated under such a kind of moral and religious influence as has been described? Whether a believer in revelation or not, does he not know that without sound morals there can be no happiness, and that there is no morality like the morality of the New Testament? Does he not know that without religion the human heart can never be at rest, and that there is no religion like the religion of the Bible? Every well-informed man knows, that, as a general fact, it is impossible to impress the obligations of morality with any efficiency on the heart of a child, or even on that of an adult, without an appeal to some code which is sustained by the authority of God; and for what code will it be possible to claim this authority, if not for the code of the Bible?

But perhaps some will be ready to say, The scheme is indeed an excellent one, provided only it were practicable; but the idea of introducing so extensive and complete a course of study into our common schools is entirely visionary, and can never be realized. I answer, that it is no theory which I have been exhibiting, but a matter of fact, a copy of actual practice. The above system is no visionary scheme, emanating from the closet of a recluse, but a sketch of the course of instruction now actually pursued by thousands of schoolmasters, in the best district schools that have ever been organized. It can be done; for it has been done—it is now done;—and it ought to be done. If it can be done in Europe, I believe it can be done in the United States: if it can be done in Prussia, I know it can be done in Ohio. The people have but to say the word and provide the means, and the thing is accomplished; for the word of the people here is even more powerful than the word of the King there; and the means of the people here are altogether more abundant for such an object than the means of the sovereign there. Shall this object, then, so desirable in itself, so entirely practicable, so easily

within our reach, fail of accomplishment ? For the honor and welfare of our State, for the safety of our whole nation, I trust it will not fail ; but that we shall soon witness, in this commonwealth, the introduction of a system of common-school instruction, fully adequate to all the wants of our population.

But the question occurs, *How* can this be done ? I will give a few brief hints as to some things which I suppose to be essential to the attainment of so desirable an end.

MEANS OF SUSTAINING THE SYSTEM.

1. **TEACHERS** must be skilful, and trained to their business. It will at once be perceived, that the plan above sketched out proceeds on the supposition that the teacher has fully and distinctly in his mind the whole course of instruction, not only as it respects the matters to be taught, but also as to all the best modes of teaching, that he may be able readily and decidedly to vary his method according to the peculiarities of each individual mind which may come under his care. This is the only true secret of successful teaching. The old mechanical method, in which the teacher relies entirely on his text-book, and drags every mind along through the same dull routine of creeping recitation, is utterly insufficient to meet the wants of our people. It may do in Asiatic Turkey, where the whole object of the school is to learn to pronounce the words of the Koran in one dull, monotonous series of sounds ; or it may do in China, where men must never speak or think out of the old beaten track of Chinese imbecility ; but it will never do in the United States, where the object of education ought to be to make immediately available, for the highest and best purposes, every particle of real talent that exists in the nation. To effect such a purpose, the teacher must possess a strong and independent mind, well disciplined, and well stored with every thing pertaining to his profession, and ready to adapt his instructions to every degree of intellectual capacity, and every kind of acquired habit. But how can we expect to find such teachers, unless they are trained

to their business ? A very few of extraordinary powers may occur, as we sometimes find able mechanics, and great mathematicians, who had no early training in their favorite pursuits ; but these few exceptions to a general rule will never multiply fast enough to supply our schools with able teachers. The management of the human mind, particularly youthful mind, is the most delicate task ever committed to the hand of man ; and shall it be left to mere instinct, or shall our schoolmasters have at least as careful a training as our lawyers and physicians ?

2. Teachers, then, must have the means of acquiring the necessary qualifications ; in other words, there must be institutions in which the business of teaching is made a systematic object of attention. I am not an advocate for multiplying our institutions. We already have more in number than we support, and it would be wise to give power and efficiency to those we now possess before we project new ones. But the science and art of teaching ought to be a regular branch of study in some of our academies and high schools, that those who are looking forward to this profession may have an opportunity of studying its principles. In addition to this, in our populous towns, where there is opportunity for it, there should be large model-schools, under the care of the most able and experienced teachers that can be obtained ; and the candidates for the profession, who have already completed the theoretic course of the academy, should be employed in this school as monitors or assistants, thus testing all their theories by practice, and acquiring skill and dexterity under the guidance of their head master. Thus, while learning, they would be teaching, and no time or effort would be lost. To give efficiency to the whole system, to present a general standard and a prominent point of union, there should be at least one model teachers' seminary, at some central point,—as at Columbus,—which shall be amply provided with all the means of study and instruction, and have connected with it schools of every grade, for the practice of the students, under the immediate superintendence of their teachers.

3. The teachers must be competently supported, and

devoted to their business. Few men attain any great degree of excellence in a profession unless they love it, and place all their hopes in life upon it. A man cannot, consistently with his duty to himself, engage in a business which does not afford him a competent support, unless he has other means of living, which is not the case with many who engage in teaching. In this country especially, where there are such vast fields of profitable employment open to every enterprising man, it is not possible that the best of teachers can be obtained, to any considerable extent, for our district schools, at the present rate of wages. We have already seen what encouragement is held out to teachers in Russia, Prussia, and other European nations, and what pledges are given of competent support to their families, not only while engaged in the work, but when, having been worn out in the public service, they are no longer able to labor. In those countries, where every profession and walk of life is crowded, and where one of the most common and oppressive evils is want of employment, men of high talents and qualifications are often glad to become teachers even of district schools; men who in this country would aspire to the highest places in our colleges, or even our halls of legislation and courts of justice. How much more necessary, then, here, that the profession of teaching should afford a competent support!

Indeed, such is the state of things in this country, that we cannot expect to find male teachers for all our schools. The business of educating, especially young children, must fall, to a great extent, on female teachers. There is not the same variety of tempting employment for females as for men; they can be supported cheaper, and the Creator has given them peculiar qualifications for the education of the young. Females, then, ought to be employed extensively in all our elementary schools, and they should be encouraged and aided in obtaining the qualifications necessary for this work. There is no country in the world where woman holds so high a rank, or exerts so great an influence, as here; wherefore, her responsibilities are the greater, and she is under obligations to

render herself the more actively useful. I think our fair countrywomen, notwithstanding the exhortations of Harriet Martineau, Fanny Wright, and some other *ladies* and *gentlemen*, will never seek distinction in our public assemblies for political discussion, or in our halls of legislation : but in their appropriate work of educating the young, of forming the opening youthful mind to all that is good and great, the more they distinguish themselves the better.

4. The children must be made comfortable in their school; they must be punctual, and attend the whole course. There can be no profitable study without personal comfort ; and the inconvenience and miserable arrangements of some of our school-houses are enough to annihilate all that can be done by the best of teachers. No instructor can teach unless the pupils are present to be taught, and no plan of systematic instruction can be carried steadily through, unless the pupils attend punctually and through the whole course.

5. The children must be given up implicitly to the discipline of the school. Nothing can be done unless the teacher has the entire control of his pupils in school-hours, and out of school too, so far as the rules of the school are concerned. If the parent in any way interferes with, or overrules, the arrangements of the teacher, he may attribute it to himself if the school is not successful. No teacher ever ought to be employed to whom the entire management of the children cannot be safely intrusted ; and better at any time dismiss the teacher than counteract his discipline. Let parents but take the pains and spend the money necessary to provide a comfortable school-house and a competent teacher for their children, and they never need apprehend that the discipline of the school will be unreasonably severe. No inconsiderable part of the corporal punishment that has been inflicted in schools, has been made necessary by the discomfort of school-houses and the unskilfulness of teachers. A lively, sensitive boy is stuck upon a bench full of knot-holes and sharp ridges, without a support for his feet or his back, with a scorching fire on one side of him and a freezing wind on the other ; and a stiff Orbilius of a master, with wooden brains

and iron hands, orders him to sit perfectly still, with nothing to employ his mind or his body, till it is *his turn to read*. Thus confined for hours, what can the poor little fellow do but begin to wriggle like a fish out of water, or an eel in a frying-pan? For this irrepressible effort at relief he receives a box on the ear; this provokes and renders him still more uneasy, and next comes the merciless ferula; and the poor child is finally burnt and frozen, cuffed and beaten, into hardened roguery or incurable stupidity, just because the avarice of his parents denied him a comfortable school-house and a competent teacher. [On the subject of school discipline, I solicit attention particularly to the answers to question 3, in Appendix B, to this Report.]

6. A beginning must be made at certain points, and the advance towards completeness must be gradual. Every thing cannot be done at once, and such a system as is needed cannot be generally introduced till its benefits are first demonstrated by actual experiment. Certain great points, then, where the people are ready to co-operate, and to make the most liberal advances, in proportion to their means, to maintain the schools, should be selected, and no pains or expense spared, till the full benefits of the best system are realized; and as the good effects are seen, other places will very readily follow the example. All experience has shown that governmental patronage is most profitably employed, not to do the entire work, but simply as an incitement to the people to help themselves.

To follow up this great object, the Legislature has wisely made choice of a Superintendent, whose untiring labors and disinterested zeal are worthy of all praise. But no great plan can be carried through in a single year; and if the Superintendent is to have opportunity to do what is necessary, and to preserve that independence and energy of official character which are requisite to the successful discharge of his duties, he should hold his office for the same term, and on the same conditions, as the Judges of the Supreme Court.

Every officer engaged in this, or in any other public work, should receive a suitable compensation for his ser-

vices. This, justice requires ; and it is the only way to secure fidelity and efficiency.

There is one class of our population for whom some special provision seems necessary. The children of foreign emigrants are now very numerous among us, and it is essential that they receive a good ENGLISH EDUCATION. But they are not prepared to avail themselves of the advantages of our common English schools, their imperfect acquaintance with the language being an insuperable bar to their entering on the course of study. It is necessary, therefore, that there be some preparatory schools, in which instruction shall be communicated both in English and their native tongue. The English is, and must be, the language of this country, and the highest interests of our State demand it of the Legislature to require that the English language be thoroughly taught in every school which they patronise. Still, the exigencies of the case make it necessary that there should be some schools expressly fitted to the condition of our foreign emigrants, to introduce them to a knowledge of our language and institutions. A school of this kind has been established in Cincinnati, by benevolent individuals. It has been in operation about a year, and already nearly three hundred children have received its advantages. Mr. Solomon, the head teacher, was educated for his profession in one of the best institutions of Prussia, and in this school he has demonstrated the excellences of the system. The instructions are all given both in German and English, and this use of two languages does not at all interrupt the progress of the children in their respective studies. I cannot but recommend this philanthropic institution to the notice and patronage of the Legislature.

In neighborhoods where there is a mixed population, it is desirable, if possible, to employ teachers who understand both languages, and that the exercises of the school be conducted in both, with the rule, however, that all the reviews and examinations *be in English only*.

These suggestions I have made with unfeigned diffidence, and with a sincere desire that the work which has been so nobly begun by the Legislature of Ohio, may be

carried forward to a glorious result. I should hardly have ventured to take such liberty, had not my commission expressly authorized me to "make such practical observations as I might think proper," as well as to report facts. I know that I am addressing enlightened and patriotic men, who have discernment to perceive, and good feeling to appreciate, every sincere attempt, however humble it may be, for the country's good; and I have therefore spoken out plainly and directly the honest convictions of my heart; feeling assured that what is honestly meant will, by high-minded men, be kindly received.

All which is respectfully submitted,

C. E. STOWE.

Columbus, Dec. 18th, 1837.

NOTE.

I CANNOT close my report without acknowledging my special obligations to some gentlemen whose names do not occur in it. To Professor Dörner, of the University of Tuebingen, I am particularly indebted for his unwearied kindness and assiduity in directing me to the best schools, and introducing me to the teachers. To Dr. Bowring of London, and Professors Pryme and Henslow of the University of Cambridge, I am under particular obligations. Dr. Drake of Cincinnati, and Hon. W. C. Rives and Hon. Henry Clay of the United States Senate, also rendered me timely aid. Hundreds of teachers, and other gentlemen interested in education, whose sympathies I enjoyed, I shall always remember with pleasure and gratitude.

APPENDIX.

(A.)

PRUSSIAN SCHOOL-LAWS.

IN establishing a uniform school system in Prussia, great difficulty has been encountered from the local usages and privileges of different sections, of which the inhabitants have been extremely tenacious. Great care has been taken to avoid all needless offence, and to prevent local jealousies. Old usages and privileges, so far as possible, have been respected, and *prejudices* have not been rashly attacked, but left to be gradually undermined by the growing advantages of the system. This course has certainly been a wise one ; but one that has required great patience and perseverance on the part of the government, and a great amount of special legislation. In examining the Prussian laws pertaining to the schools for elementary instruction, and teachers' seminaries alone, exclusive of the high schools, gymnasia, universities, &c., I find that there are no less than two hundred and thirty-nine different edicts now in force, of which two hundred and twenty-six have been issued by Frederick William III. The earliest date is July 30th, 1736, and the latest, July, 1834.

The subjects and the number of the different edicts are as follows :

I. General organization of the school system. Eleven edicts, from July, 1736, to August, 1831.

II. Duty of parents to send their children to the elementary schools. Nine edicts, from January, 1769, to January, 1831, namely :

1. Seven on the general duties of parents ; and,
2. Two having particular reference to the manufacturing districts.

III. Instruction and education in the schools. Thirty-two edicts, from December, 1794, to September, 1832, namely :

1. Seven on religious instruction.
2. Seven on the general subjects of instruction, and their order.
3. Four on instruction in agriculture and the arts.
4. Two on vacations and dismissions from school.
5. Twelve on the regulation of scholars out of school-hours.

IV. Duty of districts to maintain schools and teachers. Nine edicts, from June, 1790, to December, 1830.

V. The right of appointing teachers. Seven edicts, from September, 1812, to January, 1831.

VI. Teachers of the schools. Sixty-five edicts, from November, 1733, to December, 1833, namely :

1. Ten on the calling and examination of teachers.
2. Eight on the personal rights and duties of teachers.
3. Five on the salaries of teachers.
4. Twelve on teachers engaging in other employments.
5. Two on the dismissing and pensioning of teachers.
6. Twelve on the deposing of teachers.
7. Four on providing for the families of deceased teachers.

VII. Duties of magistrates in respect to the schools. Twelve edicts, from December, 1810, to March, 1828.

VIII. School property. Thirty-seven edicts, from January, 1801, to October, 1833, namely :

1. Fourteen on school funds and their management.
2. Twenty-one on school-houses.
3. Two on settlement of accounts.

IX. Regulations peculiar to schools in large cities. Four edicts, from June, 1811, to November, 1827.

X. Institutions for special purposes. Thirty-four edicts, from September, 1811, to January, 1834, namely :

1. Four on schools for the deaf mutes.
2. One on orphan-houses.
3. Four on ecclesiastical instruction.
4. Nine on private schools.
5. One on infant schools.
6. Two on girls' schools.
7. Thirteen on schools for the Jews.

XI. Education of teachers. Twenty edicts, from September, 1818, to August, 1833, namely :

1. Seven on instruction in and out of the seminary.
2. Five on the personal rights and obligations of the students.
3. Six on the military duties of the students.
4. Two on associations of teachers.

It is by a persevering, steady, determined series of efforts, carried through a long course of years, that the Prussian government has attained to a school system of such excellence and perfection. When Frederick William III. ascended the throne, in 1797, the Prussian system was no better than the Scotch system, or the New England system, if it were not indeed altogether inferior to these ; and it is only by forty years of hard work, forty years of intense labor, directed to this very point, that this noble system has been completed, which is now attracting the admiration and provoking the emulous zeal of the whole civilized world. Nor do the Prussians yet consider their system as perfect, but are still laboring as zealously for improvement as they were thirty years ago. Let not the government of Ohio, then, be discouraged, because the very slight degree of attention which they have for a very short time given to this subject, has not set them at once on the pinnacle of perfection. I hope the Legislature will continue, at least for a half century to come, to make this one of their chief objects of attention.

(B.)

QUERIES ON EDUCATION.

THE following inquiries, with some others not here included, were made out by a committee of the Association of Teachers in Hamilton county. I obtained the answers during my tour in Europe, from Mr. Wood of the Sessional School, in Edinburgh, Scotland, Rev. Mr. Kunze of the Frederick Orphan-House, in Berlin, Prussia, and Professor Schwartz of the University of Heidelberg, in Baden. As I received the answers orally, and in different languages, I cannot pretend to give them with verbal accuracy ; but I have endeavored in every instance to make a faithful representation of the sentiment.

1. What is the best method of inculcating moral and religious duty in schools ?

Mr. Wood. Every morning I have recitations in the Bible, accompanied with such brief and pertinent remarks as naturally occur in connexion with the recitation.

Mr. Kunze. In Prussia the scholars are all taught Luther's Smaller Catechism ; they have a daily recitation in the Bible, beginning with the historical portions ; the schools are always opened and closed with prayer, and the singing of some religious hymns. The Bible and Psalm-book are the first books which are put into the hands of the child, and they are his constant companions through the whole course of his education, and required to be such through life.

Professor Schwartz. Every teacher should have a religious spirit, and, by his personal influence, diffuse it among his pupils. The religious and moral instruction in the schools of Baden is similar to that in Prussia, as stated by Mr. Kunze.

2. What is the best mode of using the Bible in schools ?

Mr. W. Take the whole Bible, just as it is in our translation ; for the younger children, select the easier historical portions, and go through with it as the scholars advance.

Mr. K. In Prussia we have tried all sorts of ways, by extracts, by new translations, by commentaries, written expressly for schools ; but, after all these trials, there is now but one opinion among all acquainted with the subject ; and that is, that the whole Bible, just as it stands in the translations in common use, should be a reading and recitation book in all the schools. In the Protestant schools, Luther's translation is used ; and in the Catholic schools, the translations approved by that church. The children are required not merely to repeat the words of the translation by rote, but to give a good exhibition of the real sentiment in their own language.

Prof. S. Answer similar to Mr. Kunze's, above.

3. Method of governing schools—moral influence—rewards of merit—emulation—corporal punishment ?

Mr. W. I use all the purely moral influence I can ; but rewards for the meritorious are highly necessary ; and as to the principle of emulation, I appeal to it more and more the longer I teach. The evils of emulation, such as producing discouragement or exciting envy in the less successful scholars, I avoid by equalising the classes as much as possible, so that all the scholars of each class may, as to their capabilities of improvement, be nearly on a level. I know no successful school for young scholars where corporal punishment is disused. The teacher must retain it as a last resort.

Mr. K. The Bible, prayers, and singing, are most essential helps to the consistent teacher in governing his scholars ; but premiums, emulation, and corporal punishment, have hitherto been found indispensable auxiliaries. In our schools we have premiums of books, and in the orphan-house there is a prize of fifty dollars annually awarded to each of the most meritorious scholars, which is allowed to accumulate in the savings bank till the pupil comes of age, when it is given to him to aid in establishing him in business. Each teacher keeps a journal, divided under different heads, of all the delinquencies of his scholars, and if any one has six in a month, he must suffer corporal punishment. The instrument of punishment is a cow-skin ; but no teacher is allowed to inflict more than four blows at any one time, or for any offence. This kind of punishment is not often needed. Of the three hundred and eighty boys in the orphan-house, not more than two in a month render themselves liable to it. After the scholar enters the gymnasium, he is no longer liable to corporal punishment ; but in all the schools below this, it is held in reserve as the last resort.

Prof. S. I do not approve of rewards as a means of discipline. Emulation may be appealed to a little ; but much of it is not good, it is so liable to call forth bitter and unholy feeling. The skilful teacher, who gains the confidence and affection of his scholars, can govern without emulation or rewards, and with very little of corporal punishment. In a school in Heidelberg of one hundred and fifty children under ten years of age, not two in a year suffer this kind of punishment. In Baden the teacher is not allowed to strike a scholar without obtaining permission of the school-inspector, and in this way all hasty and vindictive punishments are prevented. The daily singing of religious hymns is one of the most efficient means of bringing a school under a perfect discipline by moral influence.

4. What is generally the best method of teaching ?

Mr. W. As much as possible by conversation ; as little as may be by mere book recitation. The pupil must always learn from the book.

Mr. K. Lively conversation. Very few teachers in Prussia ever use a book in recitation. The pupils study from books, and recite without them.

Prof. S. The living word in preference to the dead letter.

5. Employment of female teachers ?

Mr. W. For young children they do well ; and if good female teachers could be obtained, they might, perhaps, carry female education through, without the help of male teachers.

Mr. K. Female teachers have not been much employed in Prussia ; they are not generally successful. In a few instances they have done well.

Prof. S. Man is the divinely-appointed teacher ; but for small children female teachers do well ; and in respect to all that pertains to the heart and the fingers, they are even better than male teachers. It is not good that females should be educated entirely by teachers of their own sex ; the female cannot be educated completely without the countenance of man to work upon the heart.

6. Is there any difference in the course of instruction for male and female schools ?

Mr. K. None in the primary schools ; but in the higher schools the course of instruction for males is more rigidly scientific than for females ; and some branches of study are appropriate to the one class of schools which do not at all come into the other, and *vice versa*.

7. Public endowments for female schools of a high order ?

Mr. W. There are no such endowments in Scotland.

Mr. K. There are very few in Prussia ; only one in Berlin, but that a very good one. Female schools of a high order are mostly sustained by individual effort, under the supervision of the magistrates, but without aid from the government.

Prof. S. We have none in Baden, nor are they needed for the female. The house is her school ; and such are her susceptibilities, and her quickness of apprehension, that she is fitted by Providence to learn from real life ; and she often learns thus, more successfully than boys can be taught in the school.

8. Number of studies to be pursued simultaneously in the different stages of instruction ?

Mr. W. I begin with reading and writing (on slates) together, and, as the scholars advance, increase the number of branches.

Mr. K. We begin all together, reading, writing, arithmetic, grammar, &c., and so continue throughout.

Prof. S. The younger the fewer, the older the more.

9. Infant schools ?

Mr. W. For children who are neglected by their parents, for poor orphans, and such like, they are excellent ; but parents who are able to take care of their own children, ought to do it, and not send them to the infant school.

Mr. K. I regard them as highly useful for all classes of children, the rich and the poor, the good and the bad ; but the Prussian government discourages them, except for the vicious and the neglected. The King admits them only where parental instruction cannot be had.

Prof. S. Highly useful, and very much increasing in Europe. In Italy, particularly in Lombardy, they are fast gaining ground, under the care of truly Christian teachers.

10. The Pestalozzian system ?

Mr. W. It has many good things, with some quackery. As a whole, it is too formal.

Mr. K. In Prussia, not approved as a whole, and in arithmetic entirely disused.

Prof. S. One of the steps by which we arrived at our present stage of advancement ; but we have got beyond it now.

11. Number of pupils to one teacher in the different stages of instruction ?

Mr. W. In the elementary stages, if the teacher has good monitors,* he may safely take charge of from one to six hundred pupils ; as they advance, he must diminish the number, but only on account of the difficulty of obtaining good monitors in the higher branches.

Mr. K. In Prussia, generally about forty in the elementary branches, and in the higher branches fewer.

Prof. S. In Baden the maximum is eighty, on account of the difficulty, in that populous district, of maintaining a sufficient number of schoolmasters for the whole population. As the scholars advance, the number is diminished.

12. Systematic division of the different branches of instruction in schools ?

Mr. K. The schools in Prussia are all divided according to the different branches, and each branch has its own teacher.

Prof. S. Not good to attempt a systematic division in the elementary schools, but very useful for the higher schools. Young children need to be brought under the influence of one teacher, and not have their attention and affection divided among many.

13. Mode of instructing those who are preparing themselves to be teachers ?

Mr. W. Employ them as monitors under a good teacher, with some theoretical instruction. This is matter of opinion, not of experience ; for we have in Scotland no institutions for the preparation of teachers.

Mr. K. In the seminaries for teachers, there are lectures on the theory of education, mode of teaching, &c. ; but the pupils are taught principally by practical exercises in teaching the scholars of the model-schools attached to these institutions, and they also labor to perfect themselves in the branches they are to teach.

Prof. S. The general principles of method may be communicated in lectures, but schools for actual practical exercise in teaching are indispensable. They must also become perfectly familiar with the branches they are to teach.

14. Estimation in which the teacher is held, and his income in proportion to that of the other professions ?

Mr. W. With us, rising, in both respects ; but as yet far below the other professions.

Mr. K. In Prussia, the elementary teachers are highly respected and competently maintained ; they rank as the better sort of mechanics, and the head teachers rank next to clergymen. The salary low—that of the subordinate teachers, very low.

Prof. S. With us, the worthy teacher holds a respectable rank, and can sit at table with noblemen. The salary has recently been raised, but it is still below that of the clergyman.

15. Subordination among teachers ?

Mr. W. Very desirable, but exceedingly difficult to carry it to any extent.

Mr. K. As strict subordination among the teachers of the school, as among the officers of the army.

* Monitors, in Mr. Wood's school, occupy the place of assistant teachers, and each class has its monitor.

Prof. S. Strict subordination must be maintained.

16. Mode of securing punctual and universal attendance of scholars till the full round of instruction is completed ?

Mr. W. By acting on the parents.

Mr. K. By strict laws, rigorously executed.

Prof. S. By law.

17. Control of teachers over their scholars out of school-hours ?

Mr. W. The laws of the school are never to be violated, even out of school-hours. Difficult to carry it any further.

Mr. K. The teacher has the control, so far as he can get it. Government sustains him in it.

Prof. S. In all that relates to the school, the teacher must have the control out of school-hours.

18. How are schools affected by political changes in the administration of the government ?

Mr. W. We have had fears, but as yet have suffered no actual evil.

Mr. K. We have no changes in Prussia.

Prof. S. The school must remain sacred and inviolate, untroubled by political changes.

19. School apparatus and library ?

Mr. W. Very desirable, but little done that way, as yet, in Scotland.

Mr. K. Most of our schools are provided with them, and we consider them very important.

Prof. S. The teachers must have access to good books, and if they are industrious and skilful, the pupils will not suffer for want of a library.

20. How can accuracy of teaching be secured ?

Mr. W. Every thing depends on the teacher.

Mr. K. Very accurate in Prussia ; the government will have it so.

Prof. S. The teacher must understand his profession, and devote himself to it.

21. Governmental supervision of schools, and mode of securing responsibility in the supervisors ?

Mr. W. I cannot tell. In this country it is very inefficient, as it must be, unless the visitors receive pay for their services.

Mr. K. In this country the governmental supervision is very strict, and produces a very happy influence. The supervisors are paid for their work, and obliged to attend to it. Responsibility is secured by requiring minute and accurate periodical reports, and by a special visitation as often as once in three years.

Prof. S. The supervisors must be paid ; there must be strict subordination, accurate returns, and special visitations.

22. How are good teachers to be obtained in sufficient numbers ?

Mr. W. I cannot tell. It is difficult here.

Mr. K. By means of our teachers' seminaries ; we have them in abundance.

Prof. S. By teachers' seminaries, and private teaching, we have enough. In your country it must always be difficult, while there is such an amount of business accessible which is so much more lucrative.

23. Extent of qualification demanded of elementary teachers?

Mr. W. In Scotland there is no general rule.

Mr. K. & Prof. S. In Prussia and Baden, the demands are ample, and rigidly enforced.

24. Governmental supervision of private schools?

Mr. W. Of doubtful expediency.

Mr. K. Very strict in Prussia, and altogether beneficial in its influence.

Prof. S. Leave the private schools free, but regulate them, and see that the teachers do their duty.

25. Associations of teachers?

Mr. W. Not yet introduced in Scotland, but very desirable.

Mr. K. & Prof. S. Highly useful, and demanded and regulated by the government. Written essays and discussions, and mutual communication of experience, the business of these associations.

(C.)

Extracts from the Examination of Dr. Nicholas Henry Julius, before the Education Committee of the British House of Commons, July 7th, 1834.*

The Earl of Kerry in the chair.

Are you a native of Prussia?

I was born in Hamburgh, but have resided in Prussia.

Have you been in the habit of making inquiries respecting the state of education in Prussia?

I conducted a journal partly devoted to popular education, a great portion of it filled by official documents furnished me by the Ministry of Instruction, presided over by Baron Altenstein, and consequently I am well aware of what is going on in this branch in Prussia. The whole journal was conducted under the patronage of the Prussian government, which took a number of copies, and distributed them among the Regencies and schools throughout the country.

Have you been in the habit of visiting the schools yourself?

Yes, in person.

In a public or private capacity?

With an official commission.

Are the inhabitants of Prussia very much divided in their religion?

Yes. In the Rhenish Provinces, in Westphalia, in Silesia, the num-

* With the Minutes of this examination, and several other important documents, I was politely furnished, by the help of Dr. Bowring, M. P. for Westminster. The questions and answers I have in some instances condensed and abridged, which I know Dr. Julius, considering my object of getting as much information into as small a space as possible, will excuse me for doing. I publish the extracts chiefly for the purpose of confirming and illustrating my own statements by the testimony of a man of the high character and ample opportunities possessed by Dr. Julius.

ber of Protestants and Catholics is nearly equal. But in the whole kingdom the proportion is eight Protestants to five Catholics.

Do the latest returns indicate a state of continual prosperity in the schools?

Yes, a continued increase of the number of schools, of the number of seminaries for teachers, and of the number of pupils.

Can you state to the committee the expense of the primary schools to the government?

The general expense of the whole education is not less than three hundred thousand pounds sterling, and makes more than a twenty-fifth part of the whole expenditures of the monarchy.

That is exclusive of the expense borne by the different communes?

Yes—which is probably three or four times as much more.

Does this include the universities?

Yes—it does; I am not able to separate that from elementary instruction.

What is the salary of a schoolmaster in a common elementary school in Prussia?

Many have not more than ten pounds (sterling) a year, and some have thirty, and in Berlin it may amount to sixty pounds.

Does that include the house?

The house is given besides.

Has he any land?

If there is not any land, when commons are divided there must be set apart so much land as would be necessary for feeding a cow, and for raising such vegetables as the family of the schoolmaster shall require. Sometimes he gets also a certain quantity of potatoes, hay, corn, or fuel.

How much should you think, in an agricultural district, he would require to make him comfortable?

At least fourteen pounds.

What would be the salary of a clergyman in such a district?

From twenty to thirty pounds.

We have a number of schools in Prussia erected by voluntary subscription, for criminal boys and girls, and for the offspring of convicts and vagrants. There are at present twenty-seven such institutions. In Eastern Prussia, one of the poorest of the provinces, there are small towns of two thousand five hundred to three thousand inhabitants, which have erected such schools for six or twelve children. It would be impossible to collect money enough to keep them in a separate house. Some half dozen or a dozen Christian, moral, and religious families are sought out, mostly schoolmasters, mechanics, and farmers, and in each one of these, one of the criminal children is placed. There they attend the public schools, on Sundays they attend the church service, after which they are catechised, the religious instruction of the whole week is repeated, and those parts of their education that have been neglected are gone through with. The whole expense of each child in such a family is not more than two pounds per annum.

Are the elementary schoolmasters for the most part competent to teach the schools well?

Certainly they are ; they are all examined, severely examined ; there is no one appointed without it.

How long does a schoolmaster, intended for one of those poorer districts, stay in the Seminary for Teachers ?

Three years is the usual course.

Would a master so qualified be content with ten pounds a year ?

Yes. In some parts they cannot get more.

Do those masters never attempt to increase their income by doing any thing on their own account ?

They have no time to do that, except to take care of their little garden.

Do they not sometimes abandon the profession in consequence of their being so very ill paid ?

It is sometimes the case, but rarely. They are mostly educated at the expense of the government, and have opportunity of being promoted to other schools furnishing better emolument.

Does the schoolmaster associate with the clergyman on the footing of equality ?

Not entirely on an equality, for the clergyman has always the superintendence of the school.

Does the schoolmaster expect to be a clergyman ?

No, he cannot ; that is quite a different kind of education.

What is the general age that a pupil at a seminary begins to be appointed to a school ?

From twenty to twenty-three.

What is the annual expense which each individual costs to the government ?

I should think about nine or ten pounds annually.

Are the schoolmasters exempt from service in the army ?

During the time they are in the school they are entirely ; and afterwards, if unemployed, they are obliged to serve only one year in the army, and not three years, as others do.

From what class do the country schoolmasters principally come ?

Most of the country schoolmasters are the sons of farmers and organists, or those who despair of, or who want the means of, studying long enough to get an appointment as clergymen.

You said one of the motives of the schoolmaster, in addition to the salary received, was the wish to do good. They must generally, then, be persons of a religious turn of mind ?

The whole teaching of the seminaries is directed to instil into them a deep feeling of religion.

How long has this system been established ?

It has been in full vigor now fifteen years.

What is the effect on the population ?

An excellent one. To give a very short account of the good effect of this general instruction, I can present the committee with the number of young criminal delinquents during different years. In the year 1828 the proportion was one to sixteen thousand nine hundred and twenty-four inhabitants. In 1829 it was one to twenty-one thousand five hundred and twenty-four ; diminishing, therefore.

What is the age to which the youths are taken ?

Till sixteen years.

You cannot state the proportion before this system came into operation?

No—nobody knows. This was the first year when the Minister of Public Instruction gave directions to make lists of the juvenile delinquents.

Have you ever found any person enlisted in the army, or coming before the government in any way, not able to read or write?

It is very rarely the case since the new system has been introduced.

Has the Prussian government introduced schools into Posen and the Polish provinces?

Yes.

Are the Polish and German languages taught in those schools?

Yes, both. It is the law, that when the language is other than German, both languages be taught.

Has the effect on the Polish population been evident?

There are two or three sources of improvement of the Polish population. The first is the training of children in schools, which was never done before. The second is the three years' service in the army. We have regimental schools—schools for soldiers and non-commissioned officers, and the officers, before being promoted, are examined. The Poles come into the army very uncouth, but they return very nice young men. They give the example, usually marrying after their return, and are of great use to their neighbors. The third source of improvement is the taking away of the immense number of manual taxes which existed in Poland.

What is the penalty on parents for not sending their children to school?

To pay a fine, or they are sent to prison.

Would the parent be liable to a fine unless it could be shown he had not sent his child?

Yes.

What kind of punishment is inflicted on the child?

Corporal punishment, and that as little as possible.

Does the same law exist in the manufacturing districts of Prussia?

Yes.

Are no children employed in manufactories under fourteen?

Yes; but then proprietors of the manufactories must send them to the evening schools, and some of them have established, at their own expense, schools for the children.

The law, then, is modified to suit the peculiar circumstances of those districts?

There is an indulgence given to the manufacturing districts.

Is it found that a child can attend school and also work in a manufactory at the same time—in the same day, for instance?

It has been found that it is not always the case. We had, in Berlin, evening schools for such children. Those were afterwards changed to morning schools, because it was found that the children were too weak and too drowsy to give attention to what they were taught in the evening.

How many hours a day is the child, who is put to this employment in the manufactory, expected to stay at the school?

Two hours at least—and, besides that, on Sunday.

Do the clergymen, both Catholic and Protestant, take great pains to see that the children attend school?

Yes.

Do you know any instance in which a difficulty has arisen on account of the religious belief of the different parts of the community?

No. They are quite separate in religious instruction. If the commune can afford the means, they are separated into different schools. But when only one can be erected, the religious instruction is given by different persons. It is usual to give the religious instruction in the morning, because the attention is then freshest.

How many different sects are there in Prussia?

There are Catholics and Protestants, the Lutherans and the Calvinists, some very few Mennonites, and some Jews.

Are not the Lutherans and Calvinists now united?

Yes. Not throughout the whole monarchy, but in some divisions of it, the union being promoted by the government; so that, when the different members of the church are pleased to do this, the government gives every facility.

Suppose a school contains both Catholics and Protestants: do both the Protestant and Catholic clergymen superintend it?

Yes.

Do you find there is any difficulty?

No—in general not.

Does the Protestant father have no apprehension that the Catholic master will try to make a convert of his son, or *vice versa*?

No. The children are always educated in the religion of the father.

How can they teach the history of the Reformation in such schools?

It is taught only very generally.

Is there any considerable portion of time devoted to religious instruction?

Yes; from four to six hours a week, there being a religious lesson almost every day.

Are there prayers in the schools?

Yes, always, at the beginning and the end.

Suppose the children are of mixed character as to religion?

The master would have a prayer equally approved by the different sects.

Are the Jewish children obliged to attend during the prayer?

Yes. The moment the children have taken their seats, they rise, and one of them, the monitors, or the teacher himself, engages in prayer, while the children stand.

Have they forms of prayer among the Lutherans?

Yes. But in some parts I believe they are also extemporaneous.

You have not stated what payment is required from each child?

It varies; I am not sure what it is.

Even the very poor parents do pay something for the tuition of their children?

Yes, a small contribution; but those who are receiving alms,

those on the poor-list, do not pay. There are schools for the poor, and, besides, some free places in most of the grammar-schools.

Do you remember, from your own knowledge, what the character and attainments of the schoolmasters were previous to the year 1819?

I do not recollect; but I do know they were very badly composed of non-commissioned officers, organists, and half-drunken people. It has not risen like a fountain at once. Since 1770, there has been much done in Prussia and throughout Germany for promoting a proper education of teachers, and by them of children.

In your own observation has there been a very marked improvement in the character and attainments of schoolmasters, owing to the pains taken to which you have referred?

A very decided improvement.

In these schools is there a perfect equality of privileges to persons of all religious denominations?

Yes, without any distinction.

Are the Jews allowed to have any share in the management of the public schools?

No, they are not; their children may attend the schools, but when they are numerous enough, or wealthy enough, they may erect a separate school. We have an example in the town of Munster, where they have erected so excellent a school, that many Christian children, both Catholics and Protestants, attend it.

The schoolmaster is named of that persuasion of which a majority of the children consist?

Usually.

Is there always one of the faith of the minority?

Not a schoolmaster, but a religious teacher.

Is there a religious test in any of the schools?

No.

Who appoints the Board of Superintendents in the districts?

They are partly chosen by the inhabitants, and partly by the government.

Are the schools in Prussia endowed with land?

In some instances they are. The whole church lands also reverted and were put at the disposal of the State. When convents and other ecclesiastical institutions were suppressed, they were given to the general school-fund.

Are female teachers employed in the schools?

In every school where female teachers are, there is at the same time one male teacher. They are never quite alone. We have excellent seminaries for female teachers, principally in the province of Westphalia. They were founded on the old Catholic bishoprics of Munster and Paderborn; and the system has been found to do so much good, that the Prussian government is now endeavoring to introduce female teachers throughout the monarchy.

Of how many kinds are the elementary schools?

Of the popular schools there are three gradations. The first are *elementary schools*, which are for the whole mass of the population. By the law of Prussia, every child, from its sixth to the end of its fourteenth year, must be kept at school by its parent or guardian. The

indispensable branches taught are, 1st, Religion ; 2dly, Arithmetic ; 3dly, Singing ; 4thly, Reading ; 5thly, Writing ; 6thly, Gymnastic exercises ; and in the large elementary schools there are taught, in addition to these, 7thly, the German language ; 8thly, the elements of Geometry and Drawing ; 9thly, the elements of Physic, Geography, and Prussian history ; and, 10thly, simple manual labor and agriculture. In the schools for girls, female works are added, sewing, knitting, and so on. This is the first gradation, and every district or commune is bound to have such a school. If a commune is too poor to maintain a school by itself, it may combine with the neighboring one, provided that the children of both can come together at all seasons of the year without too great inconvenience. If this cannot be done, the commune must apply first to the consistory of the province, which will aid it with funds to a certain amount ; but if more help is necessary, they must apply to the Minister of Public Instruction, who will make up the deficiency.

The middle schools are the second gradation. They are formed only in towns, not in the country. The branches taught in them are, 1st, Religion and Morals ; 2dly, Reading, the German language, the German classics, Composition, and Style ; 3dly, Foreign modern languages ; 4thly, Latin, as much as is needed to exercise the faculties and judgement ; 5thly, the elements of Mathematics, and a complete practical Arithmetic ; 6thly, Natural Philosophy, to explain the phenomena of Nature ; Chemistry and Natural History ; 7thly, Geography, the use of the Globes, Astronomy, and History, especially of Prussia ; 8thly, Drawing ; 9thly, Ornamental Writing ; 10thly, Singing ; 11thly, Gymnastic exercises.

Does every town have a middle school ?

Not every town, but the large towns, that is, towns of three or four thousand inhabitants. The law demands a middle school for a town of fifteen hundred inhabitants, but indulgence is shown those smaller places which already have good schools of the first gradation.

At what age do the children go to the middle schools ?

It depends not upon their age, but their knowledge.

Are the masters of these middle schools trained in the same seminaries as the teachers of the elementary schools ?

There are sometimes, but not always, separate seminaries for them.

Is it equally obligatory to send children to the middle schools ?

No. They may or may not.

Are they more expensive than the schools of the first gradation ?

Yes.

Are the boys and girls, who go to those middle schools, from the families of tradesmen and opulent farmers ?

Not opulent, but in such a situation that they can afford to pay a little more. There are also mechanics in good circumstances who send their children there. Every one who can afford it may do it.

Will you state the number of middle schools, pupils, &c. ?

In the year 1831 there were middle schools for boys, four hundred and eighty-one ; for girls, three hundred and forty-two ; in all, eight hundred and twenty-three. Of pupils, there were boys, fifty-six thousand eight hundred and seventy-nine ; girls, forty thousand five hundred

and ninety-eight ; in all, ninety-seven thousand four hundred and seventy-seven. Of teachers, there were males, two thousand two hundred and ninety-six ; females, two hundred and forty-one. In the middle schools the different branches of instruction are usually taught by different teachers.

How many hours per day does the tuition of the middle schools continue ?

Seven hours, except Wednesdays and Saturdays, when there is no school in the afternoon.

(D.)

WEEKLY COURSE OF STUDY

IN THE TEACHERS' SEMINARY AND BOYS' SCHOOL UNDER THE CARE OF DR. DIESTERWEG, AT BERLIN, IN THE SUMMER TERM, 1836.

The Teachers' Seminary is divided into three classes, which are designated by the Roman numerals on the left hand of the columns, and the Boys' School into six, designated by the Arabic figures in the same column. The students in the Teachers' Seminary are employed as instructors in the Boys' School, under the inspection of their teachers. The capital letters at the right hand of the columns are the initials of the teachers who superintend the class in the particular branch mentioned. The whole number of instructors, exclusive of the pupils in the teachers' department, is six.

HOURS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
7 to 8.	II. Arithmetic . . . R. III. Theory of music E. I. Arithmetic . . . G. 2. Latin D. and R. 3. Religion . . . B.	II. Religion . . . B. III. Botany . . . G. 1. Latin . . . Q. 2. Religion . . . B. 3. Religion . . . B.	II. Theory of music E. III. Religion . . . B. I. Arithmetic . . . G. 2. Latin . J. and R. 3. Religion . . . B.	II. Botany . . . G. III. Geometry . . . S. 1. German . . . R. 2. Latin Q. and R. 3. Religion . . . B.	II. Religion . . . B. III. Arithmetic . . . G. 1. Latin . . . Q. 2. Religion . . . B. 3. Religion . . . B.	II. Arithmetic R. III. Religion . B. I. Arithmetic G. 2. Latin Q. and R. 3. Religion . . . B.
8 to 9.	II. Drawing . . . F. III. Arithmetic . . . G. 1. History . . . Q. 2. German . . . R. 3. Singing . . . E. 4. Latin . . . R. 5. Arithmetic . . . S. 6. Religion . . . D.	II. School-keeping B. III. Botany . . . G. 1. Religion . . . B. 2. German . . . R. 3. French . . . B. 4. Religion . . . S. 5. Singing E. and D. 6. Religion . . . D.	II. German . . . B. III. Violin . . . E. 1. Latin . . . Q. 2. German . . . R. 3. German . . . B. 4. Latin . . . R. 5. Religion . . . G. 6. German . . . S.	II. Botany . . . G. III. Singing . . . E. 1. Latin . . . Q. 2. History . . . R. 3. Arithmetic . . . S. 4. Latin . . . R. 5. Arithmetic . . . S. 6. Religion . . . D.	II. School-keeping . B. III. Singing . . . E. 1. Religion . . . B. 2. Geography . . . G. 3. French . . . B. 4. Religion . . . S. 5. Arithmetic . . . G. 6. Arithmetic R.	II. German . B. III. Singing . E. 1. Latin . Q. 2. Arithmetic B. 3. and S. 4. Religion . G. 5. Arithmetic R.
9 to 10.	II. Drawing . . . F. III. Singing . . . E. 1. German . . . R. 2. French . . . B. 3. Geography . . . S. 4. German . . . S. 5. German . . . D. 6. Reading . . . G.	II. Arithmetic . . . R. III. German . . . B. 1. French . . . B. 2. Arithm. B. and S. 3. Singing . . . E. 4. German . . . D. 5. German . . . D. 6. Reading . . . G.	II. Singing . . . E. III. History . . . B. 1. German . . . R. 2. French . . . B. 3. Geography . . . S. 4. German . . . D. 5. Reading G. and S. 6. Reading . . . G.	II. Arithmetic . . . R. III. Geography . . . B. 1. Singing . . . E. 2. Arithmetic . . . B. 3. Geography . . . S. 4. German . . . S. 5. Reading D. & G. 6. Reading . . . G.	II. Ornamental writing M. III. Religion . . . B. 1. French . . . B. 2. German . . . R. 3. Singing . . . E. 4. German . . . S. 5. German . . . D. 6. Reading . . . G.	II. Singing . E. III. History . B. 1. German . R. 2. French . B. 3. German . B. 4. German . S. 5. Reading . D. 6. and G.

NORMAL SCHOOLS

AND

TEACHERS' SEMINARIES.

“Ich versprach Gott : Ich will jedes preussische Bauerkind für ein Wesen ansehen, das mich bei Gott verklagen kann, wenn ich ihm nicht die beste Menschen- und Christen-Bildung schaffe, die ich ihm zu schaffen vermag.”

“I promised God, that I would look upon every Prussian peasant child as a being who could complain of me before God, if I did not provide for him the best education, as a man and a Christian, which it was possible for me to provide.”

Dinter's Letter to Baron Von Altenstein.

WHEN the benevolent Franke turned his attention to the subject of popular education in the city of Hamburgh, late in the seventeenth century, he soon found that children could not be well taught without good teachers, and that but few good teachers could be found unless they were regularly trained for the profession. Impressed with this conviction, he bent all his energies towards the establishment of a Teachers' Seminary, in which he finally succeeded, at Halle, in Prussia, about the year 1704 ; and from this first institution of the kind in Europe, well-qualified teachers were soon spread over all the north of Germany, who prepared the way for that great revolution in public instruction, which has since been so happily accomplished under the auspices of Frederick William III. and his praiseworthy coadjutors. Every enlightened man, who, since the time of Franke, has in earnest turned his attention to the same subject, has been brought to the same result ; and the recent movements in France, in Scotland ; in Massachusetts, Connecticut, New York,

Ohio, and other States in the American Union, all attest the very great difficulty, if not entire impossibility, of carrying out an efficient system of public instruction without seminaries expressly designed for the preparation of teachers.

Having devoted some attention to this subject, and having spent considerable time in examining institutions of the kind already established in Europe, I propose in this paper to exhibit the result of my investigations. In exhibiting this result I have thought proper to draw out, somewhat in detail, what I suppose would be the best plan, on the whole, without expecting that all parts of the plan, in the present state of education in our country, will be carried into immediate execution. I propose what I think ought to be aimed at, and what I doubt not will ultimately be attained, if the spirit which is now awake on the subject be not suffered again to sleep.

The sum of what I propose is contained in the six following propositions, namely :

I. The interests of popular education in each State demand the establishment, at the seat of government, and under the patronage of the Legislature, of a NORMAL SCHOOL,* that is, a *Teachers' Seminary and model-school*, for the instruction and practice of teachers in the science of education and the art of teaching.

II. Pupils should not be received into the Teachers' Seminary under sixteen years of age, nor until they are well versed in all the branches usually taught in common schools.

III. The model-school should comprise the various classes of children usually admitted to the common schools, and should be subject to the same general discipline and course of study.

IV. The course of instruction in the Teachers' Seminary should include three years, and the pupils be divided into three classes, accordingly.

* The French adjective *normal* is derived from the Latin noun *norma*, which signifies a *carpenter's square*, a *rule*, a *pattern*, a *model*; and the very general use of this term to designate institutions for the preparation of teachers, leads us at once to the idea of a *model-school for practice*, as an essential constituent part of a *Teachers' Seminary*.

V. The senior classes in the Teachers' Seminary should be employed, under the immediate instruction of their professors, as instructors in the model-school.

VI. The course of instruction in the Teachers' Seminary should comprise lectures and recitations on the following topics, together with such others as further observation and experience may show to be necessary :

1. A thorough, scientific, and demonstrative study of all the branches to be taught in the common schools, with directions at every step as to the best method of inculcating each lesson upon children of different dispositions and capacities, and various intellectual habits.

2. The philosophy of mind, particularly in reference to its susceptibility of receiving impressions from mind.

3. The peculiarities of intellectual and moral development in children, as modified by sex, parental character, wealth or poverty, city or country, family government, indulgent or severe, fickle or steady, &c. &c.

4. The science of education in general, and full illustrations of the difference between education and mere instruction.

5. The art of teaching.

6. The art of governing children, with special reference to imparting and keeping alive a feeling of love for children.

7. History of education, including an accurate outline of the educational systems of different ages and nations, the circumstances which gave rise to them, the principles on which they were founded, the ends which they aimed to accomplish, their successes and failures, their permanency and changes, how far they influenced individual and national character, how far any of them might have originated in premeditated plan on the part of their founders, whether they secured the intelligence, virtue, and happiness of the people, or otherwise, with the causes, &c.

8. The rules of health, and the laws of physical development.

9. Dignity and importance of the teacher's office.

10. Special religious obligations of teachers in respect to benevolent devotedness to the intellectual and moral

welfare of society, habits of entire self-control, purity of mind, elevation of character, &c.

11. The influence which the school should exert on civilization and the progress of society.

12. The elements of Latin, together with the German, French, and Spanish languages.

On each of the topics above enumerated, I shall attempt to offer such remarks as may be necessary to their more full developement and illustration ; and then state the argument in favor of, and answer the objections which may be urged against, the establishment of such an institution as is here contemplated.

To begin with the first proposition.

I. The interests of popular education in each State demand the establishment, at the seat of government, and under the patronage of the Legislature, of a Normal School, that is, a Teachers' Seminary and model-school, for the instruction and practice of teachers in the science of education and the art of teaching.

If there be necessity for such an institution, there can be little doubt that the Legislature should patronise and sustain it ; for, new as our country is, and numerous as are the objects to which individual capital must be applied, there can be no great hope, for many years to come, of seeing such institutions established and supported by private munificence. It is a very appropriate object of legislative patronage ; for, as the advantages of such an institution are clearly open to all the citizens of the State, and equally necessary to all, it is right that each should sustain his proper share of the expense.

Reserving my general argument in favor of these establishments till after a more full developement of their object, organization, and course of study, I shall confine my remarks under this head to the subject of legislative patronage, and the influence which such an institution would exert, through the Legislature and officers of government, on the people at large. And in order that the institution may exert the influence here contemplated, it will appear obviously necessary that it be placed at the seat of government.

Popular legislators ought to have some objects in view besides the irritating and often petty questions of party politics. Any observing man, who has watched the progress of popular legislation among us, cannot but have noticed the tendency of continued and uninterrupted party bickering to narrow the mind and sour the temper of political men, to make them selfish, unpatriotic, and unprincipled. It is highly necessary for their improvement as men, and as republican lawgivers, that the bitterness and bigotry of party strife should sometimes be checked by some great object of public utility, in which good men of all parties may unite, and the contemplation and discussion of which shall enlarge the views and elevate the affections. The Legislatures of several States have already had experience of these benefits. The noble institutions for deaf mutes, for the blind, and for the insane, which have grown up under their care, and been sustained by their bounty, are not less beneficial by the moral influence they exert, every year, on the officers of government who witness their benevolent operations, than by the physical and intellectual blessings which they confer on the unfortunate classes of persons for whom they were more particularly designed. Who can witness the proficiency of the blind and the mute in that knowledge which constitutes the charm of life, as witnessed in the annual exhibitions of these institutions at Columbus, during the sessions of the Legislature, without feeling the blessedness of benevolence, and inwardly resolving to be himself benevolent? Without some such objects in view, political character deteriorates, and the legislator sinks to the demagogue. When our American Congress has had noble objects in view; when it has been struggling for the rights of man, and the great principles which are the foundation of free institutions, it has been the nursery of patriotism and the theatre of great thoughts and mighty deeds; but when its objects have been mean, and its aims selfish, how sad the reverse in respect to its moral character and national influence!

Colleges, and institutions for the higher branches of classical learning, have seldom flourished in this country

under legislative patronage ; because the people at large, not perceiving that these institutions are directly beneficial to them, allow their legislators to give them only a hesitating, reluctant, and insufficient support. No steady, well-digested plan of improvement is carried consistently through, but the measures are vacillating, contradictory, and often destructive, not from want of sagacity to perceive what is best, but simply from want of interest in the object, and a consequent determination to maintain it at the cheapest rate. But an institution of the kind here contemplated, the people at large will feel to be for their immediate benefit. It is to qualify teachers for the instruction of their own children ; and among the people throughout most of the free States, there is an appreciation of the advantages and necessity of good common-school instruction, which makes them willing to incur heavy sacrifices for the sake of securing it. They will, therefore, cheerfully sustain their legislators in any measure which is seen to be essential to the improvement and perfection of the common-school system ; and that the establishment of a Normal School is essential to this, I expect to prove in the course of this discussion.

Supposing the institution to be established at the seat of government, under proper auspices, the Legislature would every year witness its beneficial results ; they would attend the exhibitions of its pupils both in the seminary and in the model-school, as they now, in several States, attend the exhibitions of the blind and mute ; their views would be enlarged, their affections moved, their ideas of what constitutes good education settled ; they would return to their constituents full of zeal and confidence in the educational cause, and impart the same to them ; they would learn how schools ought to be conducted, the respective duties of parents, teachers, and school officers ; they would become the most efficient missionaries of public instruction ; and, ere long, one of the most important errands from their constituents would be, to find for them, in the Teachers' Seminary, a suitable instructor for their district school. Such an influence will be to the school system, what electricity is

to the operations of Nature, an influence unceasing, all-pervading, lightning-winged.

The Superintendent of Public Instruction, in every State, would be essentially aided by such an institution at the seat of government. He greatly needs it as a fulcrum to pry over, when he would move the Legislature or the people. He cannot bring the Legislature to the common schools, nor these to the Legislature, to illustrate existing deficiencies or recommend improvements ; but here is a model constructed under his own eye, which he can at any moment exhibit to the Legislature, and by which he can give complete illustrations of all his views.

As the young men in the seminary grow up, he watches their progress, and ascertains the peculiar qualifications and essential characteristics of each individual ; and, as he passes through the State, and learns the circumstances and wants of each community, he knows where to find the teacher best fitted to carry out his views, and give efficiency to the system in each particular location. Nothing is lost ; the impression which he makes is immediately followed up and deepened by the teacher, before it has time to cool and disappear. A superintendent of schools without a Teachers' Seminary, is a general without soldiers, depending entirely on the services of such volunteers as he can pick up on his march, most of whom enlist but for the day, and go home to sleep at night.

Such is a brief view of the reasons for legislative patronage, and a location at the seat of government. I do not imagine that one institution will be enough to supply the wants of a whole State ; but let **THE ONE** be established first, and whatever others are needful will speedily follow. *

We now proceed to our second general proposition.

II. Pupils should not be received into the Teachers'

* This article was written in its special reference to Ohio, and the new States of the West. In some of the older States, the expense of living at the seat of government might operate as an objection to the location of the Seminary there.

Seminary under sixteen years of age, nor until they are well versed in all the branches usually taught in the common schools.

The age at which the pupils leave the common school is the proper age for entering the Teachers' Seminary, and the latter should begin just where the former closes. This is young enough; for few persons have their judgements sufficiently matured, or their feelings under sufficient control, to engage in school-teaching by themselves, before they are twenty years old. It is not the design of the Teachers' Seminary to go through the common routine of the common-school course, but a thorough grounding in this is to be assumed as the foundation on which to erect the structure of the teacher's education.

III. The model-school should comprise the various classes of children usually admitted to the common schools, and should be subject to the same general discipline and course of study.

The model-school, as its name imports, is to be a model of what the common school ought to be; and it must be, therefore, composed of like materials, and subject to similar rules. The model-school, in fact, should be the common school of the place in which the Teachers' Seminary is situated; it should aim to keep in advance of every other school in the State, and every other school in the State should aim to keep up with that. It is a model for the constant inspection of the pupils in the teachers' department, a practical illustration of the lessons they receive from their professors; the proof-stone by which they are to test the utility of the abstract principles they imbibe, and on which they are to exercise and improve their gifts of teaching. Indeed, as School-counsellor Dinter told a nobleman of East Prussia, to set up a Teachers' Seminary without a model-school, is like setting up a shoe-maker's shop without leather.

IV. The course of instruction in the Teachers' Seminary should include three years, and the pupils be divided into three classes, accordingly.

The course of study, as will be seen by inspecting it in the following pages, cannot well be completed in less time than this ; this has been found short enough for professional study in the other professions, which is generally commenced at a maturer age, and after the pupil has had the advantage of an academical or collegiate course ; and if it is allowed that five or seven years are not too much to be spent in acquiring the trade of a blacksmith, a carpenter, or any of the common indispensable handicrafts, surely three years will not be deemed too much for the difficult and most important art of teaching.

V. The senior class in the Teachers' Seminary should be employed, under the immediate inspection of their professors, as instructors in the model-school. The model-school is intended to be not only an illustration of the principles inculcated theoretically in the seminary, but is calculated also as a school for practice, in which the seminary pupils may learn, by actual experiment, the practical bearing of the principles which they have studied. After two years of theoretical study, the pupils are well qualified to commence this practical course, under the immediate inspection of their professors ; and the model-school being under the inspection of such teachers, it is obvious that its pupils can suffer no loss, but must be great gainers by the arrangement.

This is a part of the system for training teachers which cannot be dispensed with, and any considerable hope of success retained. To attempt to train practical teachers without it, would be like attempting to train sailors by keeping boys upon Bowditch's Navigator, without ever suffering them to go on board a ship, or handle a rope-yarn. One must begin to teach, before he can begin to be a teacher ; and it is infinitely better, both for himself and his pupils, that he should make this beginning under the eye of an experienced teacher, who can give him directions and point out his errors, than that he should blunder on alone, at the risk of ruining multitudes of pupils, before he can learn to teach by the slow process of unaided experience.

VI. Course of instruction in the Teachers' Seminary.

1. A thorough, scientific, and demonstrative study of all the branches to be taught in the common schools, with directions, at every step, as to the best method of inculcating each lesson on children of different dispositions and capacities, and various intellectual habits.

It is necessary here to give a general outline of a course of study for the common schools of this country. The pupils usually in attendance are between the ages of six and sixteen, and I would arrange them in three divisions, as follows :

FIRST DIVISION, including the youngest children, and those least advanced, generally between the ages of six and nine.

Topics of Instruction.

1. Familiar conversational teaching, in respect to objects which fall daily under their notice, and in respect to their moral and social duties, designed to awaken their powers of observation and expression, and to cultivate their moral feelings.

2. Elements of reading.

3. Elements of writing.

4. Elements of numbers.

5. Exercises of the voice and ear—singing by rote.

6. Select readings in the Pentateuch, Psalms, and Gospels.

SECOND DIVISION, including those more advanced, and generally between the ages of nine and twelve.

Topics of Instruction.

1. Exercises in reading.

2. Exercises in writing.

3. Arithmetic.

4. Elements of geography, and geography of the United States.

5. History of the United States.

6. Moral and religious instruction in select Bible narratives, parables, and proverbs.

7. Elements of music, and singing by note.
8. English grammar and parsing.

THIRD DIVISION, most advanced, and generally between the ages of twelve and sixteen.

Topics of Instruction.

1. Exercises in reading and elocution.
2. Caligraphy, stenography, and linear drawing.
3. Algebra, geometry, and trigonometry, with their application to civil engineering, surveying, &c.
4. English composition, forms of business, and book-keeping.
5. General geography, or knowledge of the earth and of mankind.
6. General history.
7. Constitution of the United States, and of the several States.
8. Elements of the natural sciences, including their application to the arts of life, such as agriculture, manufactures, &c.
9. Moral instruction in the connected Bible history, the life and discourses of Christ, the religious observation of Nature, and history of Christianity.
10. Science and art of vocal and instrumental music.

Thorough instruction on all these topics I suppose to be essential to a complete common-school education; and though it may be many years before our schools come up to this standard, yet I think nothing short of this should satisfy us; and as fast as possible we should be laboring to train teachers capable of giving instruction in all these branches. When this standard for the common school has been attained, then, before the pupil is prepared to enter on the three years' course of study proposed in the Teachers' Seminary, he must have studied all the topics above enumerated, as they ought to be studied in the common schools.

The study of a topic, however, for the purpose of applying it to practical use, is not always the same thing as studying it for the purpose of teaching it. The process-

es are often quite different. A man may study music till he can perform admirably himself, and yet possess very little skill in teaching others; and it is well known that the most successful orators are not unfrequently the very worst teachers of elocution. The process of learning for practical purposes, is mostly that of combination or synthesis; but the process of learning for the purpose of teaching, is one of continued and minute analysis, not only of the subject itself, but of all the movements and turnings of the *feelers* of the mind, the little *antennæ* by which it seizes and retains its hold of the several parts of a topic. Till a man can minutely dissect, not only the subject itself, but also the intellectual machinery by which it is worked up, he cannot be very successful as a teacher. The orator analyzes his subject, and disposes its several parts in the order best calculated for effect; but the mental processes by which he does this, which constitute the tact that enables him to judge right, as if by instinct, are generally so rapid, so evanescent, that it may be impossible for him to recall them so as to describe them to another; and it is this very rapidity of intellectual movement, which gives him success as an orator, that renders it the more difficult for him to succeed as a teacher. The musician would perform very poorly, who should stop to recognise each volition that moves the muscles which regulate the movement of his fingers on the organ-keys; but he who would teach others to perform gracefully and rapidly, must give attention to points minute as these. The teacher must stop to observe and analyze each movement of the mind itself, as it advances on every topic; but men of genius for execution, and of great practical skill, who never teach, are generally too impatient to make this minute analysis, and often, indeed, form such habits as at length to become incapable of it. The first Duke of Marlborough was one of the most profound and brilliant military men that ever lived; but he had been so little accustomed to observe the process of his own mind, by which he arrived with such certainty at those astounding results of warlike genius which have given him the first rank

among Britain's soldiers, that he could seldom construct a connected argument in favor of his plans, and generally had but one answer to all the objections which might be urged against them, and that was usually repeated in the same words,—“Silly, silly, that 's silly.” A like remark is applicable to Oliver Cromwell, and several other men distinguished for prompt and energetic action. The mental habits best adapted for effect in the actual business of life, are not always the mental habits best suited to the teacher ; and the Teachers' Seminary requires a mode of instruction in some respects different from the practical school.

The teacher also must review the branches of instruction above enumerated with reference to their scientific connexions, and a thorough demonstration of them, which, though not always necessary in respect to their practical application to the actual business of life, is absolutely essential to that ready command which a teacher must have over them in order to put them into the minds of others.

Nor is this all. There is a great variety of methods for inculcating the same truth ; and the diversities of mind are quite as numerous as the varieties of method. One mind can be best approached by one method, and another mind by another ; and in respect to the teacher, one of the richest treasures of experience is a knowledge of the adaptation of the different methods to different minds. These rich treasures of experience can be preserved, and classified, and imparted in the Teachers' Seminary. If the teacher never studies his profession, he learns this part of his duties only by the slow and wasteful process of experimenting on mind, and thus, in all probability, ruins many before he learns how to deal with them. Could we ascertain how many minds have been lost to the world in consequence of the injudicious measures of inexperienced and incompetent teachers, if we could exhibit, in a statistical table, the number of souls which must be used up in qualifying a teacher for his profession, by intrusting him with its active duties without previous study, we could prove incontrovertibly

that it is great want of economy, that it is a most prodigious waste, to attempt to carry on a system of schools without making provision for the education of teachers.

2. The philosophy of mind, particularly in reference to its susceptibility of receiving impressions from mind.

The teacher should learn, at least, not to spoil by his awkward handling what Nature has made well ; he should know how to preserve the intellectual and moral powers in a healthful condition, if he be not capable of improving them. But, through ignorance of the nature of mind, and its susceptibilities, how often are a teacher's most industrious efforts worse than thrown away—perverting and destroying rather than improving ! Frequently, also, the good which is gained by judicious efforts in one direction is counteracted by a mistaken course in another.

Under this head there should be a complete classification of the sources of influence, a close analysis of the peculiar nature and causes of each, and of its applicability to educational purposes. There should be also a classification of the errors liable to be committed, with a similar analysis, and directions for avoiding them. It appears to me that there are some valuable discoveries yet to be made in this branch of knowledge ; and that, for the purposes of education, the powers of the mind are susceptible of a classification much better than that which has hitherto generally been adopted.

3. The peculiarities of intellectual and moral development in children, as modified by sex, parental character, wealth or poverty, city or country, family government, indulgent or severe, fickle or steady, &c.

These diversities all exist in every community, and exert a most important influence on the developements of children ; and no teacher can discharge his duties diligently and thoroughly without recognising this extensive class of influences. The influence of sex is one of the most obvious, and no successful teacher, I believe, ever manages the boys and the girls of his school in precisely the same manner. But the other sources of influence are no less important. Parental character is one. Parents of high-minded and honorable feeling, will be likely to im-

part something of the same spirit to their children. Such children may be easily governed by appeals to their sense of character, and perhaps ruined by the application of the rod. If parents are mean-spirited and selfish, great allowance should be made for the failings of their children, and double diligence employed to cultivate in them a sense of honor.

The different circumstances of wealth and poverty produce great differences in children. The rich child generally requires restraint, the poor one, encouragement. When the poor are brought in contact with the rich, it is natural that the former should feel somewhat sensitive as to the distinctions which may obtain between them and their fellows ; and in such cases special pains should be taken to shield the sensibilities of the poor child against needless wounds, and make him feel that the poverty for which he is no way blamable is not to him a degradation. Otherwise he may become envious and misanthropic, or be discouraged and unmanned. But how often does the reverse of this take place, to the great injury of the character both of the poor and the rich ! Surely it is misfortune enough to the suffering child that he has to bear the ills arising from ignorance or negligence, vice or poverty, in his parents ; and the school should be a refuge for him, where he can improve himself and be happy.

Again, city and country produce diversities in children almost as great as the difference of sex. City children are inclined to the ardent, quick, glowing temperament of the female ; country children lean more to the cooler, steadier, slower developement of the male. City children are more excitable ; by the circumstances in which they are placed, their feelings are kept in more constant and rapid motion, they are more easily moved to good, and have stronger temptation to evil ; while country children, less excitable, less rapid in their advances towards either good or evil, present, in their peculiarities, a broad and solid foundation for characters of stable structure and enduring usefulness. Though human nature is every where the same, and schools present the same general characteristics ; yet the good country teacher, if he re-

move to the city, and would be equally successful there, will find it necessary to adopt several modifications of his former arrangements.

Many other circumstances give rise to diversities no less important. It is the business of the Teachers' Seminary to arrange and classify these modifying influences, and give to the pupil the advantages of an anticipated experience in respect to his method of proceeding in regard to them. No one will imagine that the teacher is to let his pupils see that he recognises such differences among them ; he should be wise enough to keep his own counsel, and deal with each individual in such manner as the peculiar circumstances of each may render most productive of good.

4. The science of education in general, and full illustration of the difference between education and mere instruction.

Science, in the modern acceptation of the term, is a philosophical classification and arrangement of all the facts which are observed in respect to any subject, and an investigation from these facts of the principles which regulate their occurrence. Education affords its facts, and they are as numerous and as deeply interesting as the facts of any other science ; these facts are susceptible of as philosophical a classification and arrangement as the facts of chemistry or astronomy ; and the principles which regulate their occurrence are as appropriate and profitable a subject of investigation as the principles of botany or zoology, or of politics or morals. I know it has been said by some, that education is not a science, and cannot be reduced to scientific principles ; but they who talk thus either make use of words without attaching to them any definite meaning, or they confound the idea of education with that of the mere art of teaching. Even in this sense the statement is altogether erroneous, as will be shown under the next head.

The teacher should be acquainted with these facts, with their classification, their arrangement and principles, before he enters on the duties of his profession ; or he is like the surgeon who would operate on the human body

before he has studied anatomy, or the attorney who would commence practice before he has made himself acquainted with the first principles of law.

It is a common error to confound education with mere instruction ; an error so common, indeed, that many writers on the subject use the words as nearly, if not entirely, synonymous. Instruction, however, comprehends but a very small part of the general idea of education. Education includes all the extraneous influences which combine to the formation of intellectual and moral character ; while instruction is limited to that which is directly communicated from one mind to another. “ *Education and instruction* (says Hooker) are the means, the one by *use*, the other by *precept*, to make our natural faculty of reason both the better and the sooner to judge rightly between truth and error, good and evil.” A man may become well *educated*, though but poorly *instructed*, as was the case with Pascal and Franklin, and many others equally illustrious ; but if a man is well *instructed*, he cannot, without some great fault of his own, fail to acquire a good *education*. *Instruction* is mostly the work of others ; *education* depends mainly on the use which we ourselves make of the circumstances by which we are surrounded. The mischiefs of defective *instruction* may often be repaired by our own subsequent efforts ; but a gap left down in the line of our *education* is not so easily put up, after the opportunity has once passed by.

5. The art of teaching.

The *art* of teaching, it is true, is not a *science*, and cannot be learned by theoretic study alone, without practice. The *model-school* is appropriately the place for the acquisition of this art by actual practice ; but, like all the rational arts, it rests on scientific principles. The theoretical instruction, therefore, in this branch, will be limited mainly to a developement of the principles on which it is founded ; while the application of those principles will be illustrated, and the art of teaching acquired, by instructing in the model-school under the care of the professors, and subject to their direction and remarks. The professor assigns to the pupil his class in the model-school, he ob-

serves his manner of teaching, and notices its excellences and defects ; and after the class is dismissed, and the student is with him alone, or in company only with his fellow-students, he commends what he did well, shows him how he might have made the imperfect better, and the erroneous correct, pointing out, as he proceeds, the application of theoretic principles to practice, that the lessons in the model-school may be really an illustration of all that has been taught in the Teachers' Seminary.

6. The art of governing children, with special reference to the imparting and keeping alive of a feeling of love for children.

Children can be properly governed only by affection ; and affection, rightly directed, is all-powerful for this purpose. A school governed without love is a gloomy, mind-killing place ; it is like a nursery of tender blossoms filled with an atmosphere of frost and ice. Affection is the natural magnet of the mind in childhood ; the child's mind is fitted by its Creator to be moved by a mother's love ; and cold indifference or stern lovelessness repels and freezes it. In governing children there is no substitute for affection, and God never intended there should be any.

General rules can be given for the government of a school ; the results of experience can be treasured up, systematized, and imparted ; the candidate for the teacher's office can be exercised to close observation, patience, and self-control ; and all these are essential branches of instruction in the art of governing. Still, if there be no feeling of love for children, all this will not make a good school-governor. There is great natural diversity in individuals in regard to this, as in all other affections ; yet every one whom God has fitted to be a parent has the elements of this affection, and these elements are susceptible of developement and improvement.

7. History of education, including an accurate outline of the educational systems of different ages and nations ; the circumstances which gave rise to them ; the principles on which they were founded ; the ends which they aimed to accomplish ; their successes and failures, their perma-

nency and changes; how far they influenced individual and national character; how far any of them might have originated in premeditated plan on the part of their founders; whether they secured the intelligence, virtue, and happiness of the people, or otherwise, with the causes, &c.

To insure success in any pursuit, the experience of our predecessors is justly considered a valuable, and generally an indispensable aid. What should we think of one who claimed to be a profound politician while ignorant of the history of political science; while unacquainted with the origin of governments, the causes which have modified their forms and influences, the changes which have taken place in them, the different effects produced by various systems under diverse influences, and of the thousand combinations in which the past treasures wisdom for the future? What should we think of the lawyer who knew nothing of the history of law? or of the astronomer, ignorant of the history of astronomy? In every science and every art we recognise the value of its appropriate history; and there is not a single circumstance that gives value to such history, which does not apply, in all its force, to the history of education. Yet, strange to say, the history of education is entirely neglected among us; there is not a work devoted to the subject in the English language; and very few, indeed, which contain even notices or hints to guide one's inquiries on this deeply-interesting theme. I wish some of those writers who complain that education is a *hackneyed* subject, a subject so often and so much discussed that nothing new remains to be said upon it, would turn their inquiries in this direction, and I think they will find much, and that too of the highest utility, which will be entirely new to the greater part even of the reading population.

Man has been an educator ever since he became civilized. A great variety of systems of public instruction have been adopted and sustained by law, which have produced powerful and enduring influences; and are we to set sail on this boundless ocean entirely ignorant of the courses, and soundings, and discoveries of our predecessors?

The Hebrew nation, in its very origin, was subjected

to a premeditated and thoroughly-systematized course of national instruction, which produced the most wonderful influence, and laid the foundation for that peculiar hardihood and determinateness of character, which have made them the astonishment of all ages, a miracle among nations. A full developement of this system, and a careful illustration of the particulars which gave it its peculiar strength, and of the circumstances which perverted it from good to evil, which turned strength into the force of hate, and perseverance into obstinacy, would be a most valuable contribution to the science of general education. The ancient Persians and Hindoos had ingenious and thoroughly-digested systems of public instruction, entirely diverse from each other, yet each wonderfully efficacious in its own peculiar way. The Greeks were a busily educating people, and great varieties of systems sprung up in their different States and under their different masters, all of them ingenious, most of them effective, and some of them characterized by the highest excellences. Systems which we cannot and ought not imitate, may be highly useful as warnings, and to prevent our trying experiments which have been often tried before, and failed to be useful. The Chinese, for example, have had for ages a system which is peculiarly and strictly *national* ; its object has always been to make them *Chinese*, and nothing else ; it has fully answered the purpose intended ; and what has been the result ?* A nation of machines, a people of patterns, made to order ; a set of men and women wound up like clocks, to go in a certain way, and for a certain time, with minds wonderfully nice and exact in certain little things ; but as stiff, as unsusceptible of expansion, as incapable of originating thought, or deviating from the beaten track, as one of their own graven images is of navigating a ship. In short, they are very much such a people as the Americans might become in a few centuries, if some amiable enthusiasts could succeed in establishing what they are pleased to denominate a system exclusively *American*. Education, to be useful, must be expansive, must be universal ; the

* See Note A, at the close of this Article.

mind must not be trained to run in one narrow channel ; it must understand that human beings have thought, and felt, and acted, in other countries than its own ; that the results of preceding efforts have their value, and that all light is not confined to its own little Goshen.

When a science has become fixed as to its principles, when its facts are ascertained and well settled, then its history is generally written. Why, then, have we no history of education in our language ? Simply because the science of education, with us, is yet in its infancy ; because, so far from being a hackneyed or an exhausted subject, on which nothing new remains to be said, its fundamental principles are not yet so ascertained as to become the basis of a fixed science. It cannot be pretended that there are no materials for the composition of such a history. We are not destitute of information respecting the educational systems of the most ancient nations, as the Chaldeans, Assyrians, Egyptians, and Carthaginians ; and in respect to the Hindoos, the Persians, the Greeks, the Romans, the Chinese, the modern Europeans, the materials for their educational history are nearly as ample as those for their civil history ; and the former is quite as important to the educator as the latter is to the civilian. (The brief and imperfect, but highly-interesting sketches, given by Sharon Turner in his History of England, afford sufficient proof of my assertion ; and they are to a full history of English education, as the first streaks of dawn to the risen sun. Should Teachers' Seminaries do nothing else than excite a taste and afford the materials for the successful pursuit of this branch of study only, they would more than repay all the cost of their establishment and maintenance. Systems of education which formed and trained such minds as arose in Egypt, in Judea, in Greece, systems under whose influence such men as Moses and Isaiah, Solon, and Plato, and Paul, received those first impressions which had such commanding power over their mighty intellects, may afford to us many valuable suggestions. The several topics to which I have above alluded, as particularly worthy of notice in a history of those systems,

are too obviously important to require a separate illustration.

8. The rules of health and the laws of physical development.

The care of the body while we are in this world is not less important than the culture of the mind ; for, as a general fact, no mind can work vigorously in a feeble and comfortless body ; and when the fore-castle of a vessel sinks, the cabin must soon follow. The educating period of youth is the time most critical to health ; and the peculiar excitements and temptations of a course of study, add greatly to the natural dangers of the forming and developing season of life. Teachers, therefore, especially, should understand the rules of health, and the laws of physical development ; and it is impossible that they should understand them, unless they devote some time to their study. What a ruinous waste of comfort, of strength, and of life, has there been in our educational establishments, in consequence of the ignorance and neglect of teachers on this point ! And how seldom is this important branch of study ever thought of as a necessary qualification for the office of teacher !

As it is a most sacred duty of the teacher to preserve uninjured the powers of the mind, and keep them in a healthful condition, so it is no less his duty to take the same care of the physical powers. The body should not only be kept in health, but its powers should be developed and improved with as much care as is devoted to the improvement of the mind, that all the capabilities of the man may be brought out and fitted for active duty. But can one know how to do this if he never learns ? And will he be likely to learn, unless he has opportunity of learning ? It is generally regarded as the province of teachers to finish out and improve on Nature's plan ; but if they can all be brought to understand their profession so well as not to mar and spoil what Nature made right, it will be a great improvement on the present condition of education in the world.*

* A complete History of Education, constructed on the principles sketched above, will soon be put to press by the publishers of this book.

9. Dignity and importance of the teacher's office.

Self-respect, and a consciousness of doing well, are essential to comfort and success in any honorable calling ; especially in one subject to so many external depressions, one so little esteemed and so poorly rewarded by the world at large, as that of the teacher. No station of so great importance has probably ever been so slightly estimated ; and the fault has been partly in the members of the profession itself. They have not estimated their official importance sufficiently high ; they have given a tacit assent to the superficial judgement of the world ; they have hung loosely on the profession, and too often abandoned it the first opportunity. They ought early to understand that their profession demands the strongest efforts of their whole lives ; that no employment can be more intimately connected with the progress and general welfare of society ; that the best hopes and tenderest wishes of parents and of nations depend on their skill and fidelity ; and that an incompetent or unworthy discharge of the duties of their office brings the community into the condition of an embattled host *when the standard-bearer faileth*. If teachers themselves generally had a clear and definite conception of the immensely-responsible place they occupy ; if they were skilled in the art of laying these conceptions vividly before the minds of the people among whom they labor, it would produce a great influence on the profession itself, by bringing it under the pressure of a mightier motive, and cause all classes of people more clearly to understand the inestimable worth of the good teacher, and make them more willing to honor and reward him. And this, too, would be the surest method of ridding the profession of such incumbents as are a disgrace to it, and an obstacle to its elevation and improvement. Julius Cesar was the first of the Romans who honored school-teachers by raising them to the rank of Roman citizens, and in no act of his life did he more clearly manifest that peculiar sagacity for which he was distinguished.

10. Special religious obligations of teachers in respect to benevolent devotedness to the intellectual and moral

welfare of society, habits of entire self-control, purity of mind, elevation of character, &c.

The duties of the teacher are scarcely less sacred or less delicate than those of the minister of religion. In several important respects he stands in a similar relation to society; and his motives and encouragements to effort must, to a considerable extent, be of the same class. It is not to be expected that teaching will ever become generally a *lucrative* profession, or that many will enter it for mere love of money, or that, if any should enter it from such a motive, they would ever be very useful in it. All teachers ought to have a comfortable support, and a competency for the time of sickness and old age; but what *ought to be* and *what is*, in such a world as this, are often very different things. If a competency is gained by teaching, very few will ever expect to grow rich by it. Higher motives than the love of wealth must actuate the teacher in the choice of his profession, and animate him in the performance of its laborious duties. Such motives as the love of doing good, and peculiar affection for children, do exist in many minds, notwithstanding the general selfishness of the world; and these emotions, by a proper kind of culture, are susceptible of increase, till they become the predominant and leading desires. The teacher who has little benevolence, and little love for children, must be a miserable being, as well as a very poor teacher; but one who has these propensities strongly developed, and is not ambitious of distinction in the world of vanity and noise, but seeks his happiness in doing good, is among the happiest of men; and some of the most remarkable instances of healthy and cheerful old age are found among school-teachers. As examples, I would mention old Ezekiel Cheever, who taught school in New England for seventy-one years without interruption, and died in Boston in the year 1708, at the advanced age of ninety-three; or to Dr. G. F. Dinter, now living at Königsberg in Prussia, in the eightieth year of his age. Indeed, the ingenious author of *Hermippus Redivivus* affirms, that the breath of beloved children preserves the benevolent schoolmaster's health, as salt keeps flesh from putrefaction. In

Prussia, school-teachers generally enter on their profession at the age of twenty-two or twenty-five, and the average term of service among the forty thousand teachers there employed is over thirty years, making the average duration of a teacher's life there nearly sixty years ; a greater longevity than can be found in any profession in the United States. Many teachers continue in the active discharge of their official duties more than fifty years ; and the fiftieth anniversary of their induction to office is celebrated by a festival, and honored by a present from government.

The other qualities mentioned, self-control, purity of mind, elevation of character, are so obviously essential to a teacher's usefulness, that they require no comment. We need only remark, that these are moral qualities, and can be cultivated only by moral means ; that they are religious qualities, and must be excited and kept alive by religious motives. Will any one here raise the cry, *Sectarianism, Church and State* ? I pity the poor bigot, or the narrow-souled unbeliever, who can form no idea of religious principle, except as a *sectarian thing* ; who is himself so utterly unsusceptible of ennobling emotions, that he cannot even conceive it possible that any man should have a principle of virtue and piety superior to all external forms, and untrammelled by metaphysical systems. From the aid of such men, we have nothing to hope in the cause of sound education ; and their hostility we may as well encounter in one form as another, provided we make sure of the ground on which we stand, and hold up the right principles in the right shape.

11. The influence which the school should exert on civilization and the progress of society.

It requires no great sagacity to perceive, that the school is one of the most important parts of the social machine, especially in modern times, when it is fast acquiring for itself the influence which was wielded by the pulpit some two centuries ago, and which, at a more recent period, has been obtained by the periodical press. As the community becomes separated into sects, which bigotry and intolerance force into subdivisions still more minute, the influence of the pulpit is gradually circumscribed ; but no

such causes limit the influence of the school. Teachers need only understand the position they occupy, and act in concert, to make the school the most effective element of modern civilization, not excepting even the periodical press. A source of influence so immense, and which draws so deeply on the destinies of man, ought to be thoroughly investigated and considered, especially by those who make teaching their profession. Yet I know not, in the whole compass of English literature, a single work on the subject, notwithstanding that education is so worn-out a theme, that nobody can say any thing new upon it.

12. The elements of Latin, together with the German, French, and Spanish languages.

The languages of Europe have received most of their refinement and their science through the medium of the Latin ; and so largely are they indebted to this tongue, that the elements of it are necessary as a foundation for the study of the modern languages. That the German should be understood by teachers, especially in Pennsylvania, Ohio, and the Western States generally, is obvious from the fact, that more than half the school districts contain German parents and children, who are best approached through the medium of their own tongue ; and the rich abundance and variety of educational literature in this language, greater, I venture to say, than in all other languages together, render it an acquisition of the highest importance to every teacher. In the present state of the commercial world one cannot be said to have acquired a business education without a knowledge of French ; while our intimate relations with Mexico and South America render the Spanish valuable to us, and indeed, in the Western country, almost indispensable. The mental discipline which the study of these languages gives is of the most valuable kind, and the collateral information acquired while learning them is highly useful. Though a foreign tongue is a difficult acquisition for an adult, it is very easy for a child. In the Rhine provinces of Germany, almost every child learns, without effort, both German and French, and, in the commercial cities, English

also ; and the unschooled children of the Levant often learn four or five different languages merely by the ear. I do not suppose that the modern languages will soon become a regular branch of study in all our common schools ; still, many, who depend on those schools for their education, desire to study one or more of them, and they ought to have the opportunity ; and if we would make our common schools our best schools, as they surely ought to be, the teachers must be capable of giving instruction in some of these languages.

I have thus endeavored to give a brief view of the course of study which should be pursued in a Teachers' Seminary, and this, I suppose, in itself, affords a strong and complete argument to establish the necessity of such an institution. A few general considerations in favor of this object will now be adduced.

1. The necessity of specific provision for the education of teachers is proved by the analogy of all other professions and pursuits.

To every sort of business in which men engage, some previous discipline is considered necessary ; and this idea, confirmed by all experience, proceeds on the universal and very correct assumption, that the human mind knows nothing of business by intuition, and that miraculous inspiration is not to be expected. A man is not thought capable of shoeing a horse, or making a hat, without serving an apprenticeship at the business. Why then should the task of the schoolmaster, the most difficult and delicate of all, the management of the human mind, that most intricate and complex of machines, be left to mere intuition, be supposed to require no previous training ? That the profession of school-teacher should so long be kept so low in the scale of professions, that it should even now be so generally regarded as a pursuit which needs, and can reward, neither time nor pains spent in preparation for its important duties, is a plain proof and example of the extreme slowness of the human race to perfect the most important parts of the social system.

2. A well-endowed, competent, and central institution,

in a State, for the education of teachers, would give, in that State, oneness, dignity, and influence to the profession.

It would be a point of union that would hold the profession together, and promote that harmony and co-operation so essential to success. Teachers have been isolated and scattered, without a rallying-point or rendezvous ; and the wonderful influence which has been exerted by the Western college of teachers, (and other similar institutions in the Eastern States,) the whole secret of which is, that it affords a central point around which teachers may rally, is but a faint shadow of what might be accomplished by a well-endowed and ably-manned seminary. Let there be some nucleus around which the strength of the profession may gather, and the community will soon feel its importance, and give it its due honor.

This object cannot be accomplished by small institutions scattered through the State, nor by erecting teachers' departments in existing institutions. The aggregate expense of such an arrangement would be quite as great as that of endowing one good institution ; and without such an institution it would, after all, accomplish but very little. It would be like distributing the waters of the canal to every little village in the State, instead of having them run in one broad and deep channel, suitable for navigation.

3. Such an institution would serve as a standard and model of education throughout the community.

The only reason why people are satisfied with an inferior system of common-school instruction is, that they have no experience of a better. No community ever goes voluntarily from a better to a worse, but the tendency and the effort generally are to rise in excellence. All our ideas of excellence, however, are comparative, and there will be little prospect of advancement unless we have a standard of comparison higher than any thing to which we have already attained.

A well-managed institution at the seat of government, which should embody all real improvements, and hold up the highest standard of present attainment, being visited by the executive officers, the legislators, the judges, the members of the bar, and other enlightened and influential

men, who annually resort to the capital from every part of the State, would present a pattern to every school district, and excite emulation in every neighborhood. As an example of the rapidity with which improvements are taken, provided only there are appropriate channels for them to flow in, I may mention the practice of singing in schools, so recently introduced, and now so generally approved.

4. Such an institution would produce concentration of effort; its action would possess the vigor which strong sympathies impart; and it would tend to a desirable uniformity in books and modes of teaching.

I do not suppose that absolute perfection will ever be attained in the art of teaching; and while absolute perfection is not reached, it is certain there ought not to be entire uniformity in books and modes of teaching. But in this, as in all other human arts, there may be constant approximation towards the perfect; and this progress must be greatly accelerated by the concentration of effort, and the powerful sympathetic action of mind on mind, collected in one institution, and determined, as it were, to one focus. The action of such an institution would obviate the principal evils, now so strongly felt, arising from the diversity of books and methods; it would produce as much uniformity as would be desirable in the existing stage of improvement; and the more advanced the progress, the greater would be the uniformity.

5. All experience (experience which we generally appeal to as the safest guide in all practical matters) has decided in favor of institutions sustained by government for the education of teachers.

No country has ever yet obtained a sufficient number of well-qualified teachers in any other way; while every government which has adopted this method, and vigorously pursued it, either has already gained the object, or is in the fair way of gaining it, however unpromising the beginnings might have been. No country has ever been so well supplied with competent teachers as Prussia at the present moment, and yet, thirty years ago, the mass of school-teachers there was probably below the present

average standard of New England and Ohio. Dinter gives several examples of ignorance and incapacity during the first years of his official labor in East Prussia, which we should scarcely expect to find any where in the United States ; and the testimony of Dr. Julius before the British House of Commons, which was published in connexion with my last report to the Legislature of Ohio, gives a similar view of the miserable condition of the Prussian schools at that time.

Now, what has been the great means of effecting so desirable an object in Prussia ? Obviously, and by universal acknowledgement, the establishment of seminaries for the education of teachers.* The experiment was commenced by placing one in each of the ten provinces into which the kingdom is divided ; (equivalent to having one in each of the several States of this Union ;) and as their utility was tested, their number was increased ; till now there are more than forty for a population of fourteen millions. Wirtemberg, Bavaria, Austria, Russia, Holland, France, and all other countries which desire to obtain a sufficient number of well-qualified teachers, find it necessary to follow this example ; and I do not believe the United States are an exception to so general a rule. Indeed, such institutions must be even more necessary for us than for them, since, from the crowded state of the professions in old countries, there is much greater competition for the appointment of schoolmaster there than here.

It now only remains that I state a few of the more prominent objections which are sometimes made to these institutions, and endeavor to answer them.

1. " Such institutions are unnecessary. We have had good teachers without them, and may have good teachers still."

This is the old stereotyped objection against every attempt at improvement in every age. When the bold experiment was first made of nailing iron upon a horse's hoof, the objection was probably urged that horseshoes were entirely unnecessary. " We have had excellent horses without them, and shall probably continue to have

* See Notes B and C, at the close of this Article.

them. The Greeks and Romans never used iron horse-shoes ; and did not they have the best of horses, which could travel thousands of miles, and bear on their backs the conquerors of the world ?” So, when chimneys and glass windows were first introduced, the same objection would still hold good. “ We have had very comfortable houses without these expensive additions. Our fathers never had them, and why should we ?” And at this day, if we were to attempt, in certain parts of the Scottish Highlands, to introduce the practice of wearing pantaloons, we should probably be met with the same objection. “ We have had very good men without pantaloons, and no doubt we shall continue to have them.” In fact, we seldom know the inconveniences of an old thing till we have taken a new and better one in its stead. It is scarcely a year since the New York and European sailing packets were supposed to afford the very *ne plus ultra* of a comfortable and speedy passage across the Atlantic ; but now, in comparison with the newly-established steam-packets, they are justly regarded as a slow, uncertain, and tedious mode of conveyance. The human race is progressive, and it often happens that the greatest conveniences of one generation are reckoned among the clumsiest waste lumber of the next. Compare the best printing-press at which Dr. Franklin ever worked, with those splendid machines which now throw off their thousand sheets an hour ; and who will put these down by repeating, that Dr. Franklin was a very good printer, and made very good books, and became quite rich without them ?

I know that we have good teachers already ; and I honor the men who have made themselves good teachers, with so little encouragement, and so little opportunity of study. But I also know that such teachers are very few, almost none, in comparison with the public wants ; and that a supply never can be expected without the increased facilities which a good Teachers' Seminary would furnish.

2. “ Such an institution would be very expensive.”

True, it would cost more than it would to build a stable, or fence in a few acres of ground ; and in this view of the

matter a canal is expensive, and so is a public road, and many other things which the public good requires, and the people are willing to pay for. The only questions worthy of answer are: Whether the expense be disproportionate to the object to be secured by it? and whether it be beyond the resources of the country? To both these questions I unhesitatingly answer, No. The object to be secured is one which would fully justify any amount of expense that might be laid out upon it; and all that need be done might be done, and not a man in the State feel the poorer for it. We could not expect a perfect institution at once. We must begin where we are, and go forward by degrees. A school sufficient for all present purposes might well be maintained for five thousand dollars a year; and what is that for States with resources like most of the States of this Union, and for the sake of securing an object so great as the perfection of the school system? If the kingdom of Prussia, with fourteen millions of people, two thirds of whom are very poor, and the other third not very rich, can support *forty-two* Teachers' Seminaries, surely such States as Ohio, and Pennsylvania, and Virginia, and others, with populations of more than a million, none of whom are very poor, and many fast growing rich, can afford to support *one*.

3. "We cannot be certain that they who study in such institutions would devote themselves to the business of teaching."

This objection applies with equal force to all professional institutions; and if it is of any weight against a Teachers' Seminary, it is equally available against a medical school. The objection, however, has very little weight; for after a man has prepared himself for a profession, he generally wishes to engage in it, if he is competent to discharge its duties; and if he is not competent, the public are no losers by his withdrawal.

But let it even be supposed that a Teachers' Seminary should be established on the plan above sketched out, and occasionally a man should go successfully through the prescribed course of study, and not engage in teaching; are the public the losers by it? Is the man a worse member of

society after such a course of study, or a better ? Is he less interested in schools, or less able to perform the duties of a school officer, or less qualified to give a useful direction to the system among the people, than he would have been without such a course of study ? Is he not manifestly able to stand on higher ground in all these respects, than he otherwise could have done ? The benefit which the public would derive from such men out of the profession, (and such would be useful in every school district,) would amply remunerate all the expenses of the establishment. But such cases would be too few to avail much on either side of the argument ; certainly, in any view of them, they can argue nothing against the establishment of Teachers' Seminaries.

4. " Teachers educated in such an institution would exclude all others from the profession."

Not unless the institution could furnish a supply for all the schools, and they were so decidedly superior that the people would prefer them to all others ; in which case certainly the best interests of education demand that the statement in the objection should be verified in fact. But the success of the institution will not be so great and all-absorbing as this. It will not be able at once to supply half the number of teachers needed, and all who are educated in it will not be superior to every one who has not enjoyed its advantages. There is great diversity of natural gifts ; and some, with very slender advantages, will be superior to others who have been in possession of every facility for acquisition. That such an institution will elevate the standard of qualification among teachers, and crowd out those who notoriously fall below this standard, is indeed true ; but this, so far from being an objection, is one of its highest recommendations.

5. " One such institution cannot afford a sufficient supply for all the schools."

This is readily conceded ; but people generally admit that half a loaf is better than no bread, especially if they are hungry. If we have a thousand teachers, it is much better that three hundred of the number should be well qualified, than that all should be incompetent ; and five

hundred would be still better than three hundred, and seven hundred better than either, and the whole thousand best of all. We must begin as well as we can, and go forward as fast as we are able ; and not be like the poor fool who will not move at all, because the first step he takes from his own door will not land him at once in the place of his destination. The first step is a necessary preliminary to the second, and the second to the third, and so on till all the steps are taken, and the journey completed. The educated teacher will exert a reforming influence on those who have not been so well prepared ; he will elevate and enlarge their views of the duties of the profession, and greatly assist them in their endeavors after a more perfect qualification.* He will also excite capable young men among his pupils to engage in the profession ; for one of the greatest excitements of the young to engage in any business, is to see a superior whom they respect in the successful prosecution of it.

Every well-educated teacher does much towards qualifying those who are already in the profession without sufficient preparation, and towards exciting others to engage in it ; and thus, though the institution cannot supply nearly teachers enough for all the schools, yet all the schools will be better taught in consequence of its influence. Moreover, a State institution would be the parent of many others, which would gradually arise, as their necessity would be appreciated from the perceived success of the first.

6. “ The wages of teachers are not sufficient to induce teachers so well educated to engage in the profession.”

At present this is true ; for wages are generally graduated according to the aggregate merit of the profession, and this, hitherto, has not been very great. People will not pay high for a poor article ; and a disproportionate quantity of poor articles in market, which are offered cheap, will affect the price of the good, with the general-ity of purchasers. But let the good be supplied in such quantities as to make the people acquainted with it, and

* See Note D, at the close of this Article.

it will soon drive out the bad, and command its own price. The establishment of a Teachers' Seminary will raise the wages of teachers, by increasing their qualifications, and augmenting the real value of their services ; and people eventually will pay a suitable compensation for good teaching, with much less grudging than they have hitherto paid the cheap wages of poor teachers, which, after all, as has been well observed, is but " buying ignorance at a dear rate."*

* The New England practice of having district schools taught by college-students, during their winter vacation, has been of great and acknowledged utility both to the teachers and the schools. I have no desire to discourage this good old practice ; for I apprehend that our common district schools, for many years to come, will need the services of temporary teachers of this kind. It is to be wished, however, that our colleges would make some provision for the special instruction of such students as engage in teaching. It would not only make their teaching much more valuable, but would fit them also to become school-examiners and inspectors after they have left the vocation of school-master for some more lucrative employment.

NOTES.

(A.)

CHINESE EDUCATION.

THERE is a regular system of schools in China of two kinds, the people's schools, and schools for the nobles. The course commences when the child is five years old, and is continued very rigorously, with but few and short vacations, to the age of manhood. In the people's schools the course consists of four parts, each of which has its appropriate book. The first is called *Pe-kia-sing*, and contains the names of persons in one hundred families, which the children must commit to memory. The second is called *Tsa-tse*, and contains a variety of matters necessary to be known in the common business of life. The third is called *Tsien-tse-ouen*, a collection of one thousand alphabetical letters. The fourth is *San-tse-king*, a collection of verses of three syllables each, designed to teach the elements of Chinese morals and history. Such is the provision for the common people.

For the nobles there is a great university at *Pekin*, the *Koue-tze-kien*, to which every mandarin is allowed to send one of his sons. The candidate for admission must go first to the governor of a city of the third rank for examination, and if approved, he receives the degree of *Hien-ming*. He then goes to the governor of a city of the first rank, and, if he maintains a good examination there, is admitted to the university.

A mandarin is annually sent out from *Pekin*, to visit the higher institutions in the larger cities, and to confer degrees on the pupils, according to their progress. A class of four hundred is selected, and passes through ten examinations. The fifteen who have acquitted themselves best in all these examinations, receive the degree of *Sinoa-tsay*, the most important privilege of which is, that they are no longer liable to be whipped with the bamboo. Rich men's sons, who cannot always obtain this degree by a successful passage through the ten examinations, can procure the equivalent degree of *Kien-song* by paying a stipulated sum into the public treasury. Having attained either of these lower degrees, the pupil, after three years, can offer himself at *Pekin* for the higher degree of *Kin-jin*, which must be obtained after rigorous examination. The successful applicants for this honor, after one year longer, can demand at *Pekin* an examination for the highest

academical degree, that of Tsin-tse. He who obtains this is congratulated and feasted by his friends, he is regarded with veneration by the people, is eligible to the highest office in the state, and may be raised by the Emperor to the dignity of Han-lin.

The Emperor himself is required to be a man of learning, and the care of his early education is committed to a special college of learned men, called Tschea-sza-fu ; and he is regarded in law as the *educator* and *instructor* of his people, as well as their ruler. In each village there is a public hall, where the civil and military functionaries assemble on the first and fifteenth of every month, and a discourse is delivered to them on the Sacred Edict. This Sacred Edict contains, 1. The principles of Khong-hi, an ancient emperor. 2. A commentary by his son Young-tching, who reigned about the year 1700 ; and, 3. A paraphrase by Wang-yeou-po. It was translated into English by Rev. W. Milne, Protestant Missionary at Malacca, and printed in London in 1817.

In the above brief sketch, it is plain that the Chinese have a great veneration for learning, and that the emoluments and honors of the empire are designed to be accessible to those only who have taken academical degrees. But the whole system is arranged to make them Chinese. It excludes every thing of foreign origin, it admits neither improvement nor variation, and the result is manifest in the character of the people.

Some, however, of our modern improvements have long been known and practised in the Chinese schools. Such as the practice of the children reading and repeating together in choir, the art of mnemonics, and others of the like kind.—See *Schwartz's Geschichte der Erziehung*, vol. i. p. 68-75.

(B.)

PRUSSIAN SCHOOLS, A FEW YEARS AGO.

THE following questions and answers are from Dr. Julius's testimony, before the Committee of the British House of Commons, in 1834, respecting the Prussian School System.

“Do you remember, from your own knowledge, what the character and attainments of the schoolmasters were previous to the year 1819?”

“I do not recollect ; but I know they were very badly composed of non-commissioned officers, organists, and half-drunken people. It has not risen like a fountain at once. Since 1770, there has been much done in Prussia, and throughout Germany, for promoting a proper education of teachers, and by them of children.”

“In your own observation has there been any very marked improvement in the character and attainments of schoolmasters, owing to the pains taken to which you have referred?”

“A very decided improvement.”

Dinter, in his autobiography, gives some surprising specimens of gross incapacity in teachers, even subsequent to 1819. The following anecdotes are from that interesting work, *Dinters Leben von ihm selbst beschrieben*.

In the examination of a school in East Prussia, which was taught by a subaltern officer dismissed from the army, the teacher gave Dinter a specimen of his skill in the illustration of Scripture narrative. The passage was Luke vii., the miracle of raising the widow's son at Nain. "See, children, (says the teacher,) Nain was a great city, a beautiful city; but even in such a great, beautiful city, there lived people who must die. *They brought the dead youth out.* See, children, it was the same then as it is now—dead people couldn't go alone—they had to be carried. *He that was dead began to speak.* This was a sure sign that he was alive again, for if he had continued dead he couldn't have spoken a word."

In a letter to the King, a dismissed schoolmaster complained that the district was indebted to him 200705 dollars. Dinter supposed the man must be insane, and wrote to the physician of the place to inquire. The physician replied that the poor man was not insane, but only ignorant of the numeration-table, writing 200 70 5 instead of 275. Dinter subjoins, "By the help of God, the King, and good men, very much has now been done to make things better."

In examining candidates for the school-teacher's office, Dinter asked one where the Kingdom of Prussia was situated. He replied, that he believed it was somewhere in the southern part of India. He asked another the cause of the ignis-fatuus, commonly called Jack-with-the-lantern. He said they were spectres made by the devil. Another being asked why he wished to become a school-teacher, replied, that he must *get a living somehow*.

A military man of great influence once urged Dinter to recommend a disabled soldier, in whom he was interested, as a school-teacher. "I will do so," says Dinter, "if he sustains the requisite examination." "O," says the Colonel, "he doesn't know much about school-teaching, but he is a good, moral, steady man, and I hope you will recommend him to oblige me." *D.*—O yes, Colonel, to oblige you, if you in your turn will do me a favor. *Col.*—What is that? *D.*—Get me appointed drum-major in your regiment. True, I can neither beat a drum, nor play a fife; but I am a good, moral, steady man as ever lived.

A rich landholder once said to him, "Why do you wish the peasant children to be educated? it will only make them unruly and disobedient." Dinter replied, "If the masters are wise, and the laws good, the more intelligent the people, the better they will obey."

Dinter complained that the military system of Prussia was a great hinderance to the schools. A nobleman replied that the young men enjoyed the protection of the government, and were thereby bound to defend it by arms. Dinter asked if every stick of timber in a house ought first to be used in a fire-engine, because the house was protected by the engine? or whether it would be good policy to cut down all the trees of an orchard to build a fence with, to keep the hogs from eating the fruit?

(C.)

SCHOOL-COUNSELLOR DINTER.

GUSTAVUS FREDERICK DINTER was born at a village near Leipsic, in 1760. He first distinguished himself as principal of a Teacher's Seminary in Saxony, whence he was invited by the Prussian government to the station of School-Counsellor for Eastern Prussia. He resides at Königsberg, and about ninety days in the year he spends in visiting the schools of his province, and is incessantly employed nearly thirteen hours a day for the rest of his time, in the active duties of his office ; and that he may devote himself the more exclusively to his work, he lives unmarried. He complains that his laborious occupation prevents his writing as much as he wishes for the public, yet, in addition to his official duties, he lectures several times a week, during term-time, in the University at Königsberg, and always has in his house a number of indigent boys, whose education he superintends, and, though poor himself, gives them board and clothing. He has made it a rule to spend every Wednesday afternoon, and, if possible, one whole day in the week besides, in writing for the press ; and thus, by making the best use of every moment of time, though he was nearly forty years old before his career as an author commenced, he has contrived to publish more than sixty original works, some of them extending to several volumes, and all of them popular. Of one book, a school catechism, fifty thousand copies were sold previous to 1830 ; and of his large work, the School-Teacher's Bible, in 9 volumes 8vo., thirty thousand copies were sold in less than ten years.

He is often interrupted by persons who are attracted by his fame, or desire his advice ; and while conversing with his visitors, that no time may be lost, he employs himself in knitting ; and thus not only supplies himself with stockings and mittens, suited to that cold climate, but always has some to give away to indigent students and other poor people. His disinterestedness is quite equal to his activity, and of the income of his publications he devotes annually nearly five hundred dollars to benevolent purposes. Unweariedly industrious, and rigidly economical as he is, he lays up nothing for himself. He says, "I am one of those happy ones, who, when the question is put to them, 'Lack ye any thing?' (Luke xxii. 35,) can answer with joy, 'Lord, nothing.' To have more than one can use is superfluity, and I do not see how this can make any one happy. People often laugh at me, because I will not incur the expense of drinking wine, and because I do not wear richer clothing, and live in a more costly style. Laugh away, good people ; the poor boys also, whose education I pay for, and for whom, besides, I can spare a few dollars for Christmas gifts and new-year's presents, they have their laugh too."

Towards the close of his autobiography, he says respecting the King

of Prussia, "I live happily under Frederick William ; he has just given me one hundred and thirty thousand dollars to build churches with in destitute places ; he has established a new Teachers' Seminary for my poor Polanders, and he has so fulfilled my every wish for the good of posterity, that I can myself hope to live to see the time when there shall be no schoolmaster in Prussia more poorly paid than a common laborer. He has never hesitated, during the whole term of my office, to grant me any reasonable request for the helping forward of the school-system. God bless him. I am with all my heart a Prussian. And now, my friends, when ye hear that old Dinter is dead, say, 'May he rest in peace ; he was a laborious, good-hearted, religious man ; he was a Christian.' "

A few such men in the United States would effect a wonderful change in the general tone of our educational efforts.

(D.)

IMPROVEMENT OF SCHOOL-TEACHERS.

AT the commencement of the late school efforts in Prussia, for the benefit of teachers already in the profession who had not possessed the advantages of a regular training, it was the custom for them to assemble during the weeks of vacation in their schools, and, under the care of a competent teacher, go through a regular course of lessons for their improvement. Of the entire course a careful and minute journal was kept and transmitted to the government. The following is from the journal of a four weeks' course of this kind, which was held at Reggenwald in 1821, under the charge of School-Counsellor Bernhardt. The King gave his special approbation of this journal, and caused a large number of copies to be printed and circulated throughout the kingdom. The Minister of Public Instruction expresses himself respecting it in the following terms :—

"The view presented and acted upon by School-Counsellor Bernhardt, that the important point is not the quantity and variety of knowledge communicated, but its solidity and accuracy ; and that the foundation of all true culture consists in the education to piety, the fear of God, and Christian humility ; and, accordingly, that those dispositions, before all things else, must be awakened and confirmed in teachers, that thereby they may exercise love, long-suffering, and cheerfulness, in their difficult and laborious calling—these principles are the only correct ones, according to which the education of teachers every where, and in all cases, can and ought to be conducted, notwithstanding the regard which must be had to the peculiar circumstances and the intellectual condition of particular provinces and communities. The Ministry hereby enjoin it anew upon the Regency, not only to make these principles their guide in their own labors in the common schools and Teachers' Seminaries, but also to commend and urge them in the most

emphatic manner on all teachers and pupils in their jurisdiction. That this will be faithfully done, the Ministry expect with so much the more confidence, because in this way alone can the supreme will of his Majesty the King, repeatedly and earnestly expressed, be fulfilled. Of the manner in which the Regency execute this order, the Ministry expect a Report, and only remark further, that as many copies of the journal as may be needed will be supplied."

The strongly religious character of the instructions in the following journal will be noticed; but will any *Christian* find fault with this characteristic, or with the King and Ministry for commending it?

The journal gives an account of the employment of every hour in the day, from half past six in the morning to a quarter before nine in the evening. Instead of making extracts from different parts of it, I here present the entire journal for the last week of the course, that the reader may have the better opportunity of forming his own judgement on the real merits of the system.

FOURTH WEEK.

Monday, Oct. 22. A. M. 6½-7. Meditation. Teachers and parents, forget not that your children are men, and that, as such, they have the ability to become reasonable. God will have all men to come to the knowledge of the truth. As men, our children have the dignity of men, and a right to life, cultivation, honor, and truth. This is a holy, inalienable right, that is, no man can divest himself of it without ceasing to be a man. 7-8½. Bible instruction. Reading the Bible, and verbal analysis of what is read. Jesus in the wilderness. 9-12. Writing. Exercise in small letters. P. M. 2-5. Writing as before. 5½-7. Singing. 8-8½. Meditation. Our schools should be Christian schools for Christian children, and Jesus Christ should be daily the chief teacher. One thing is needful. Jesus Christ, the same yesterday, to-day, and for ever. The great end of our schools, therefore, is the instruction of children in Christianity; or the knowledge of heavenly truths in hope of eternal life; and to answer the question, What must I do to be saved? Our children, as they grow up, must be able to say, from the conviction of their hearts, We know and are sure that thou art the Christ, the Son of the living God. Beloved teachers, teach no Christianity without Christ, and know that there cannot be a living faith without knowledge and love.

Tuesday, Oct. 23. A. M. 6-7. Meditation. Christian schools are the gardens of God's spirit, and the plantations of humanity, and, therefore, holy places. How dreadful is this place! This is none other than the house of God. Teachers, venerate your schools—regard the sacred as sacred. 7-8½. Bible instruction. Reading of the Bible and verbal analysis of what is read. Luke xv. 1-10. 8½-9. Catechism. Repeating the second article with proper emphasis, and the necessary explanation of terms. 10-12. Writing. Exercise in German capitals, with the writing of syllables and words. P. M. 1-4. General repetition of the instructions for school-teachers given during the month. 4-5. Brief instruction respecting school discipline and school laws. 5-7. Singing. 8-8½. Meditation. Teachers, you should make your

school a house of prayer, not a den of murderers. Thou shalt not kill—that is, thou shalt do no injury to the souls of thy children. This you will do if you are an ungodly teacher, if you neglect your duty, if you keep no order or discipline in your school, if you instruct the children badly, or not at all, and set before them an injurious example. The children will be injured also by hurrying through the school-prayers, the texts, and catechism, and by all thoughtless reading and committing to memory. May God help you.

Wednesday, Oct. 24. 6–6 $\frac{3}{4}$. Meditation. Dear teachers, you labor for the good of mankind and the kingdom of God ; be therefore God's instruments and co-workers. Thy kingdom come. In all things approving ourselves as the ministers of God. 6 $\frac{3}{4}$ –8 $\frac{1}{2}$. Bible instruction as before, John iv. 1–15. 8 $\frac{1}{2}$ –9. Catechism. The correct and emphatic reading and repeating of the first section, with brief explanation of terms. 10–12. Instruction in school discipline and school laws. P. M. 1–3. Instruction in the cultivation of fruit-trees. For instruction in this branch of economy, the school is arranged in six divisions, each under the care of a teacher acquainted with the business, with whom they go into an orchard, and under his inspection perform all the necessary work. General principles and directions are written in a book, of which each student has a copy. More cooling is the shade, and more sweet the fruit, of the tree which thine own hands have planted and cherished. 3–5. Instruction in school discipline and school laws. 5 $\frac{1}{4}$ – $\frac{1}{2}$. Singing. 8–9. Meditation. The Christian school-teacher is also a good husband and father. Blameless, the husband of one wife, vigilant, sober, of good behavior, apt to teach, not given to wine, no striker, not greedy of filthy lucre, patient, not a brawler, not covetous, one that ruleth well his own house, having his children in subjection, with all gravity. He that readeth, let him understand.

Thursday, Oct. 25. A. M. 6–6 $\frac{3}{4}$. Meditation. Dear teachers, do all in your power to live in harmony and peace with your districts, that you may be a helper of the parents in the bringing up of their children. Endeavor to maintain the unity of the Spirit in the bond of peace. As much as in you lies, live peaceably with all men. 6 $\frac{3}{4}$ –9. Bible instruction as before, Luke vii. 11–17. Reading by sentences, by words, by syllables, by letters. Reading according to the sense, with questions as to the meaning. Understandest thou what thou redest? 10–11. Instructions as to prayer in schools. Forms of prayer suitable for teachers and children are copied and committed to memory. Lord, teach us to pray. 11–12. Writing. Exercise in capitals and writing words. P. M. 2–3. Instruction respecting prayer in the family and in the school. Forms of prayer for morning and evening, and at the table, are copied, with instructions that school children should commit them to memory, that they may aid their parents to an edifying performance of the duty of family worship ; that, as the school thus helps the family, so the family also may help the school. Use not vain repetitions. 3–5. Bible instruction. General views of the contents of the Bible, and how the teacher may communicate, analyze, and explain them to his children, yearly, at the commencement of the winter and summer terms. 5 $\frac{1}{2}$ –7. Singing. 8–9. Meditation. Teachers, acquire the confidence and love of your dis-

tricts, but never forsake the direct path of duty. Fear God, do right, and be afraid of no man. The world, with its lusts, passeth away, but he that doeth the will of God shall abide for ever.

Friday, Oct. 26. Meditation. Teachers, hearken to the preacher, and labor into his hands; for he is placed over the church of God, who will have the school be an aid to the church. Remember them that labor among you, and are over you in the Lord, and esteem them highly in love for their works' sake. Neither is he that planteth any thing, nor he that watereth any thing, but God who giveth the increase. 7-9. Bible instruction. Summary of the contents of the Bible, to be committed to memory by children from ten to fifteen years of age. 10-12. Bible instruction. Brief statement of the contents of the historical books of the New Testament. P. M. 1-5. Bible instruction. Contents of the doctrinal and prophetic books of the New Testament. Selection of the passages of the New Testament proper to be read in a country school. A guide for teachers to the use of the Bible in schools. 5-7. Singing. 8-9. Meditation. Honor and love, as a good teacher, thy King and thy father-land; and awake the same feelings and sentiments in the hearts of thy children. Fear God, honor the King, seek the good of the country in which you dwell, for when it goes well with it, it goes well with thee.

Saturday, Oct. 27. 6-6½. Meditation. By the life in the family, the school, and the church, our heavenly Father would educate us and our children for our earthly and heavenly home; therefore parents, teachers, and preachers, should labor hand in hand. One soweth and another reapeth. I have laid the foundation, another buildeth thereon; and let every man take heed how he buildeth thereon. Means of education: 1. In the family—the parents, domestic life, habits: 2. In the school—the teacher, the instruction, the discipline: 3. In the church—the preaching, the word, the sacraments. 6½-9½. Bible instruction. Rules which the teacher should observe in reading the Bible. In analyzing it. In respect to the contents of the Old Testament books, and selections from them for reading, written instructions are given and copied, on account of the shortness of the time which is here given to this topic. 10-12. Bible instruction. General repetition. P. M. 1-4. Bible instruction. General repetition. 4-5. Reading. Knowledge of the German language, with written exercises. 7-10½. Review of the course of instruction and the journal. 10½-12. Meditation. The prayer of Jesus, (John xvii.,) with particular reference to our approaching separation.

Sunday, Oct. 28. 6½-9. Morning prayer. Catechism. Close of the term. (In the open air on a hill at sunset) singing and prayer. Address by the head teacher. Subject. What our teacher would say to us when we separate from him. 1. What you have learned apply well, and follow it faithfully. If ye know these things, happy are ye if ye do them. 2. Learn to see more and more clearly that you know but little. We know in part. 3. Be continually learning, and never get weary. The man has never lived who has learned all that he might. 4. Be yourself what you would have your children become. Become as little children. 5. Let God's grace be your highest good, and let it strengthen you in the difficulties which you must encounter.

My grace is sufficient for thee—my strength is perfect in thy weakness. 6. Keep constantly in mind the Lord Jesus Christ. He has left us an example that we should follow his steps. Hymn—Lord Jesus Christ, hearken thou to us. Prayer. Benediction.

Review of the hours spent in different studies during the four weeks. Arithmetic, sixty-seven ; writing, fifty-six ; Bible, twenty-five ; meditation, thirty-six ; other subjects, twenty-six ; singing, twenty-eight. Total, two hundred and thirty-eight. From nine to ten, in the morning, was generally spent in walking together, and one hour in the afternoon was sometimes spent in the same manner.

Familiar lectures were given on the following topics : 1. Directions to teachers as to the knowledge and right use of the Bible in schools. 2. Directions to teachers respecting instruction in writing. 3. Directions for exercises in mental arithmetic. 4. Instructions respecting school discipline and school laws. 5. A collection of prayers for the school and family, with directions to teachers. 6. The German parts of speech, and how they may be best taught in a country school. 7. The day-book.

Printed books were the following : 1. Dinter's Arithmetic. 2. Dinter on Guarding against Fires. 3. Brief Biography of Luther. 4. On the Cultivation of Fruit-Trees. 5. German Grammar. 6. Baumgarten's Letter-Writer for Country Schools. 7. Luther's Catechism.

That which can be learned and practised in the short space of a few weeks, is only a little—a very little. But it is not of so much importance that we have more knowledge than others ; but most depends on this, that I have the right disposition ; and that I thoroughly understand and faithfully follow out the little which I do know.

God help me, that I may give all which I have to my school ; and that I, with my dear children, may above all things strive after that which is from above. Father in heaven, grant us strength and love for this.

THE SCHOOL LIBRARY.

MARSH, CAPEN, LYON, AND WEBB,

109, WASHINGTON STREET, BOSTON,

ARE NOW PUBLISHING, UNDER THE SANCTION OF THE MASSACHUSETTS BOARD OF EDUCATION, A COLLECTION OF ORIGINAL AND SELECTED WORKS, ENTITLED, 'THE SCHOOL LIBRARY.'

The LIBRARY will embrace two series of fifty volumes each ; the one to be in 18mo., averaging from 250 to 280 pages per volume ; the other in 12mo., each volume containing from 350 to 400 pages. The former, or *Juvenile Series*, is intended for children of ten or twelve years of age and *under* ; the latter for individuals of that age, and *upwards*,—in other words, for advanced scholars and their parents.

The LIBRARY is to consist of *reading*, and not *school*, *class*, or *text* books ; the design being to furnish youth with suitable works for perusal during their leisure hours ; works that will interest, as well as instruct them, and of such a character that they will turn to them with pleasure, when it is desirable to unbend from the studies of the school room.

The plan will embrace every department of Science and Literature, preference being given to works relating to our own Country, and illustrative of the history, institutions, manners, customs, &c., of our own people. Being intended for the *whole* community, no work of a sectarian or denominational character in religion, or of a partisan character in politics, will be admitted.

The aim will be to clothe the subjects discussed, in a popular garb, that they may prove so attractive, as to lure

the child onwards, fix his attention, and induce him, subsequently, to seek information from other and more recondite works, which, if put into his hands at the onset, would alarm him, and induce a disgust for that which would appear dry and unintelligible, and of course, uninteresting.

The intention is not to provide information for any one class, to the exclusion of others, but to disseminate knowledge among all classes. The Publishers wish the children of the Farmer, the Merchant, the Manufacturer, the Mechanic, the Laborer,—all to profit by the lights of science and literature, that they may be rendered the more virtuous and happy, and become more useful to themselves, to one another, to the community, and mankind at large. To accomplish this desirable end, the LIBRARY will embrace so wide a range of subjects, that every child may find something which will prove useful and profitable to him, whatever his situation, circumstances, or pursuits, in afterlife may be.

The project is one of great extent, and vast importance; and, if properly carried out, must become of inestimable value to the young. Whether the anticipations of the Publishers, with regard to it, will be verified, time must determine; but from the intellectual and moral, theoretical and practical character of those who have engaged to aid in the undertaking, they have good grounds for presuming that much will be accomplished, and that by their united efforts many obstacles, now existing to the mental, moral, and physical improvement of youth, will be removed, or at least be rendered more easily surmountable.

Among the individuals already engaged as writers for one or both Series, may be mentioned—the Hon. Judge Story, Jared Sparks, Esq., Washington Irving, Esq., Rev. Dr. Wayland, Professor Benjamin Silliman, Professor Denison Olmsted, Professor Alonzo Potter, Hon. Judge Buel, Dr. Jacob Bigelow, Dr. Robley Dunglison, Dr. Elisha Bartlett, Rev. Charles W. Upham, Rev. F. W. P. Greenwood, Rev. Royal Robbins, Rev. Warren Burton, Arthur J. Stansbury, Esq., E. C. Wines, Esq., Robert Rantoul, Jr., Esq., Professor Tucker, and Professor Elton.

Mrs. Sarah J. Hale, Mrs. E. F. Ellet, Mrs. Emma C. Embury, Mrs. A. H. Lincoln Phelps, Miss E. Robbins,

Miss E. P. Peabody, Miss Mary E. Lee, Miss Caroline Sedgwick.

No work will be admitted into the LIBRARY, unless it be approved by every member of the Board of Education ; which Board consists of the following individuals, viz., His Excellency Edward Everett, Chairman, His Honor George Hull, Rev. Emerson Davis, Edmund Dwight, Esq., Rev. George Putnam, Robert Rantoul, Jr., Esq., Rev. Thomas Robbins, D. D., Jared Sparks, Esq., Hon. Charles Hudson, and Hon. George N. Briggs.

The following works, have been printed, and constitute the first ten volumes of the 12mo. series, viz.

LIFE OF COLUMBUS, by WASHINGTON IRVING, a new edition, (revised by the author,) including a Visit to Palos, and other additions, a portrait of the Great Navigator, a Map, and several illustrative engravings.

PALEY'S NATURAL THEOLOGY, in two volumes, with selections from the Dissertations and Notes of LORD BROUGHAM and SIR CHARLES BELL, illustrated by numerous wood cuts, and prefaced by a Life of the Author ; (with a portrait;) the whole being newly arranged and adapted for The School Library, by ELISHA BARTLETT, M. D., *Professor of the Theory and Practice of Physic and Pathological Anatomy in Dartmouth College.*

LIVES OF EMINENT INDIVIDUALS, CELEBRATED IN AMERICAN HISTORY, in three vols., with portraits of Robert Fulton, Sebastian Cabot, and Sir Henry Vane, and autographs of most of the individuals.

VOL. I. WILL CONTAIN

Life of MAJOR-GENERAL JOHN STARK, by His Excellency Edward Everett.

" DAVID BRAINERD, by Rev. William B. O. Peabody.

" ROBERT FULTON, by James Renwick, LL. D., *Professor of Natural Philosophy and Chemistry, in Columbia College, New York City.*

" CAPTAIN JOHN SMITH, by George S. Hillard, Esq.

VOL. II. WILL CONTAIN

Life of MAJOR-GENERAL ETHAN ALLEN, by Jared Sparks, *Professor of History in Harvard University.*

" SEBASTIAN CABOT, by Charles Hayward, Jr., Esq.

" HENRY HUDSON, by Henry R. Cleveland, Esq.

" MAJOR-GENERAL JOSEPH WARREN, by Alexander H. Everett, LL. D.

" MAJOR-GENERAL ISRAEL PUTNAM, by O. W. B. Peabody, Esq.

" DAVID RITTENHOUSE, by Professor James Renwick, LL. D.

VOL. III. WILL CONTAIN

Life of WILLIAM PINKNEY, by Henry Wheaton, LL. D., *Author of History of the Northmen.*

" SIR HENRY VANE, by Rev. Charles W. Upham.

" MAJOR-GENERAL ANTHONY WAYNE, by John Armstrong, Esq.

" WILLIAM ELLERY, by Edward T. Channing, Esq.

" MAJOR-GENERAL RICHARD MONTGOMERY, by John Armstrong, Esq.

THE SACRED PHILOSOPHY OF THE SEASONS, illustrating The Perfections of God in the Phenomena of the Year. In 4 vols. By the Rev. HENRY DUNCAN, D. D., of *Ruthwell, Scotland*; with important additions, and some modifications to adapt it to American readers, by the Rev. F. W. P. GREENWOOD, of Boston.

The great value and interesting nature of these volumes, to every class of individuals, will be seen, at once, by a perusal of the following Table of Contents. The work contains a paper for every day in the year.

VOL. I.—WINTER.

I. SUNDAY.—*Goodness of God to his Rational Creatures.* The Character impressed on Nature—Compensation. Contrivance.

COSMICAL ARRANGEMENTS.

Globular Figure of the Earth. Circulation in the Atmosphere and Ocean. The Atmosphere. Ignis Fatuus. II. SUNDAY.—*General Aspect of Winter.* Phosphorescence. Aurora Borealis. Meteoric Showers. Variety of Climates. Practical Effect of the Commercial Spirit produced by a Variety of Climates. Adaptation of Organized Existences to Seasons and Climates. III. SUNDAY.—*The Omnipresence of God.* Adaptation of Organized Existences to the Tropical Regions. Adaptation of Organized Existences to Temperate and Polar Climates. The Balance Preserved in the Animal and Vegetable Creation. Night.—Its Alternation with Day. Sleep. Dreaming. IV. SUNDAY.—*The World a State of Discipline.*

THE STARRY HEAVENS.

General Remarks. Gravitation and Inertia. The Planetary System. The Sun as the Source of Light and Heat. Motions of the Planets. Resisting Medium. V. SUNDAY.—*Divine and Human Knowledge compared.* The Satellites. Relative Proportions of the Planetary System. Distance of the Fixed Stars. Immensity of the Universe. Nebulæ. Binary Stars.

THE MICROSCOPE.

VI. SUNDAY.—*Discoveries of the Telescope and Microscope compared.* Wonders of the Microscope.—Infusory Animalcules.

HYBERNATION OF PLANTS.

Plants and Animals compared. Adjustment of the Constitution of Plants to the Annual Cycle. Physiological Condition of Plants during Winter.

HYBERNATION OF INSECTS.

Instinct. VII. SUNDAY.—*On Seeing God in his Works.* Reason in the Lower Animals. Eggs. Various States. Bees. The Snail. The Beetle. VIII. SUNDAY.—*Greatness of God even in the Smallest Things.*

MIGRATIONS OF BIRDS AND QUADRUPEDS DURING WINTER.

Birds. Birds which partially migrate. Quadrupeds.

CHRISTMAS-DAY. NO SEASON UNPLEASANT TO THE CHEERFUL MIND. IX. SUNDAY.—*Proofs of Divine Benevolence in the Works of Creation.*

MIGRATION OF FISHES.

The Sturgeon, the Herring, the Cod, &c. Cetaceous Animals. Migration from the Sea into Rivers. Migration of Eels.

NEW-YEAR'S-DAY.

Migration of the Land-Crab. X. SUNDAY.—*Winter an Emblem of Death.*

HYBERNATION OF QUADRUPEDS.

Clothing. Storing Instincts. Torpidity.

HYBERNATION OF MAN.

Privation stimulates his Faculties. Provisions for his Comfort. Adaptation of his Constitution to the Season. XI. SUNDAY.—*The Unceasing and Universal Providence of God.*

INHABITANTS OF THE POLAR REGIONS.

The Esquimaux. Food and Clothing. Dwellings and Fire.

FROST.

Provision for causing Ice to Float on the Surface. The Expansive and Non-conducting Power of Ice. Amusements connected with it. XII. SUNDAY.—*Winter not Monotonous.—Boundless Variety of Nature.* Effects of Frost in the Northern Regions. Agency of Frost in Mountainous Regions. Hoar Frost.—Foliations on Window-Glass, &c. Beneficent Contrivances relative to Snow. Sagacity and Fidelity of the Dog in Snow.

GEOLOGY.

Its Phenomena consistent with the Mosaic Account of the Creation. XIII. SUNDAY.—*The Difficulty of Comprehending the Operations of Providence.* Successive Periods of Deposit. Successive Periods of Organized Existences. State of the Antediluvian World. Indications of the Action of the Deluge at the Period assigned to it in Scripture. Cuvier's Calculation respecting the Deluge. Effects of the Deluge on the Present Surface of the Earth. XIV. SUNDAY.—*The Deluge a Divine Judgement.*

VOL. II.—SPRING.

COSMICAL ARRANGEMENTS.

General Character of Spring in temperate Climates. Increasing Temperature of the Weather, and its Effects. Color and Figure of Bodies. Mountains. Rain. Springs. I. SUNDAY.—*Advantages of Vicissitude.* Rivers.

REPRODUCTION OF VEGETABLES.

Vegetable Soil. Vegetation. Preservation and Distribution of Seeds. Long Vitality of Seeds. Developement of Seeds and Plants. II. SUNDAY.—*Analogy of Nature.* The Vital Powers of Plants. Flowers.—Their Form, Color, and Fragrance. Their Organs of Reproduction, and their Secretion of Honey. The Violet.

REPRODUCTION OF ANIMALS.

The Animal Structure.—Cellular Texture—Membranes, Tendons, and Ligaments. Secretion, Digestion, and the Circulation of the Blood. III. SUNDAY.—*"The Same Lord over All."* The Animal Structure. Gastric Juice. Muscular Power. Nature of the Proof of Creative Wisdom derived from the Animal Frame. The Lower Orders of Animals. The Higher Orders of Animals.

INSTINCTS CONNECTED WITH THE REPRODUCTION OF ANIMALS.

General Remarks. Parental Affection. Insects.—Their Eggs. IV. SUNDAY.—*On the Uniformity or Sameness in the Natural and Moral World.* Insects.—Care of their Offspring, exemplified in Bees and Wasps. The Moth. The Burying-Beetle. The Ant. Gall Flies. Deposition of Eggs in the Bodies of Animals, and in Insects' Nests. Birds.—Their Eggs. Prospective Contrivances. V. SUNDAY.—*On the Domestic Affections.* Birds.—Relation of their Bodies to external Nature. Pairing. Nest-building. The Grossbeak. The Humming-bird. VI. SUNDAY.—*Regeneration.* Birds.—Nests of Swallows. Hatching of Eggs, and rearing the Brood. Quadrupeds.—The Lion. The Rabbit. Instincts of the Young.

Man.—Effects of protracted Childhood on the Individual. Effects of protracted Childhood on the Parents and on Society. VII. SUNDAY.—*On Christian Love.*

AGRICULTURE.

The Difference between the Operations of Reason and Instinct, as affording Arguments in Favor of the Divine Perfections. Origin of Agricultural Labor. Origin of Property in the Soil, and the Division of Ranks. Effects of Property in the Soil. Benefits derived from the Principles which Stimulate Agricultural Improvement. The Blessings of Labor. VIII. SUNDAY.—*Spiritual Training by Affliction.* Nature of Soils. Formation of Soils. Management of Soils.—Drainage. Irrigation. Blair-Drummond Moss. Products of the Soil.—Dissemination of Plants. IX. SUNDAY.—*The Sower.* Dissemination of Plants.—The Cocoa-Nut Tree. Mitigation of Seasons occasioned by Cultivation. The Labors of the Husbandman wisely distributed over the Year. The Corn Plants.—Their Mysterious Origin. Their Distribution over the Globe. Wheat. X. SUNDAY.—*Sabbath Morning.* The Corn-Plants.—Barley, Oats, Rice, Maize, and Millet. Leguminous Plants.—Peas and Beans. Esculent Roots.—The Potato. Vegetable Substances used for Weaving. The Flax Plant. XI. SUNDAY.—*True Science the Handmaid of Religion.* Vegetable Substances used for Weaving. The Cotton Plant. Vegetable Substances used for Cordage.—Hemp. Vegetable Substances used for Paper.

ANNIVERSARY OF THE DEATH AND RESURRECTION OF CHRIST.

The Sacrament of the Supper. The Crucifixion. The Grave. XII. SUNDAY.—*The Resurrection.*

ENJOYMENT EQUALLY DISTRIBUTED. THE ENJOYMENTS OF THE POOR IN SPRING. THE WOODS.

RETROSPECTIVE VIEW OF THE ARGUMENT.

The Power and Intelligence of the Creator. The Goodness of the Creator. The Use and Deficiency of Natural Religion.

VOL. III.—SUMMER.

COSMICAL ARRANGEMENTS.

I. SUNDAY.—*Summer the Perfection of the Year.* Increased Heat. Internal Heat of the Earth. Increased Light. Electricity. Clouds. Dew. II. SUNDAY.—*Scriptural Allusions to the Dew.* Adaptations of the Faculties of Living Beings to the Properties of Light and Air.

VEGETABLES.

Growth of Vegetables. Principles on which Horticulture is founded. History of Horticulture. The Turnip. Brassica or Cabbage. III. SUNDAY.—*Spiritual Light.* Various Garden Vegetables. Flowers.—The Rose. Fruits. Ingrafting. The Gooseberry and Currant. The Orchard. IV. SUNDAY.—*Spiritual Soil.* Productions of Warm Climates used for Human Food.—The Banana. The Date Palm. Trees used for other Purposes than Food. Vegetable Substances used in Tanning. Vegetable Fixed Oils. Vegetable Oils—Essential and Empyreumatic. Vegetable Tallow and Wax. V. SUNDAY.—*Spiritual Culture.* Vegetable Life in the Polar Regions.

ANIMALS.

Connexion between the Vegetable and Animal Kingdoms. The Sensorial Organs. Sensation and Perception. The Argonaut and Nautilus. The Coral Insect. VI. SUNDAY.—*The Invisible Architect.* Insect Transformations—Cocoons—The Silk-Worm. Insects—Their Larva State. Their Pupa or Chrysalis State. Their Imago or Perfect State. The Building Spider. Spider's Webb. VII. SUNDAY.—*Spiritual Transformation.* Insects—Legionary and Sanguine Ants. The Lion Ant—The Queen-Bee. Physiological Character of Vertebrated Animals. Reptiles—The Tortoise—The Serpent. VIII. SUNDAY.—*The Old Serpent.* Reptiles—The Saurian Tribes. Birds—Their Relative Position. The Bill. Their Power of Flying. Their Power of Vision. Their Voice. Their Selection of Food. IX. SUNDAY.—*The Ascension of Christ.* Birds—Their Gregarious Habits. Domestic Fowls—The Cock, the Turkey, and the Peacock. The Goose and the Duck. Birds of Prey—The Vulture. The Eagle. Predaceous Animals—Their

Offices in Nature. X. SUNDAY.—*Christ the Judge of the World.* Quadrupeds—Their Characteristics. Their Bodily Organs. The Bat. The Mouse. Ruminating—The Goat and Sheep. Sheep Shearing. XI. SUNDAY.—*Christ, the Good Shepherd.* Quadrupeds—The Shepherd's Dog. Ruminating—The Cow. Thick-skinned—The Hog. The Horse and Ass. The Elephant. Reflections on the Domestic Animals. XII. SUNDAY.—*The Destruction of the World, and the Renovation of the Human Frame in a Future State.* Fishes. Man—His External Structure. His Intellectual Powers. His Moral Powers. Physical Effects of Climate. Moral Effects of Climate. XIII. SUNDAY.—*The Confusion of Tongues.* Man—Human Language.

HAYMAKING—PLEASURES OF RURAL SCENERY.

THE VARIETY, BEAUTY, AND UTILITY OF ORGANIZED EXISTENCES.

RETROSPECTIVE VIEW OF THE ARGUMENT.

Adaptation. Future Existence. Discipline.

XIV. SUNDAY.—*The Day of Pentecost—One Language.*

VOL. IV.—AUTUMN.

PHENOMENA, PRODUCE, AND LABORS OF THE SEASON.

General Character of Autumn. Autumn in the City. Famine in the beginning of Autumn. Autumnal Vegetation. Progress of Vegetation in the Corn Plants. Harvest. I. SUNDAY. *Stability of Nature.* Gleaning. The Harvest Moon. Harvest-Home. Storing of Corn. Birds.—Their State in Autumn.

THE WOODS.

Their Autumnal Appearance. II. SUNDAY.—*The Powers of the World to come.* The Woods. Their Uses. Various Kinds and Adaptations of Timber.

ORIGIN OF THE ARTS.—Food, Clothing, and Shelter.

HUMAN FOOD.

Its Principle. The Moral Operation of the Principle. Its Supply not inadequate. III. SUNDAY.—*Christians "Members one of another."* Provision for the future.—Soil still uncultivated. Improved-Cultivation. Means now in Existence. Vegetable and Animal Food. Fruits—Their Qualities. Drink. IV. SUNDAY.—*"The Bread of Life."* Milk. Wine. Tea and Coffee. Sugar. The Pleasures connected with Food. Comparison between the Food of Savage and Civilized Man. V. SUNDAY.—*"Give us this Day our daily Bread."* Agriculture of the Greeks.—Their Harvest. Agriculture of the Romans. Their Harvest. Progress of British Agriculture. Modern Continental Agriculture.

HUMAN CLOTHING.

Its Principle. Its Primitive State. VI. SUNDAY.—*The Emptiness of Human Attainments.* Its Ancient History. Commercial History of the Raw Material. The Silk Manufacture.—Its Modern History. History of Mechanical Contrivances connected with it. Rearing of the Cocoons, &c. The Cotton Manufacture.—Its Foreign History. VII. SUNDAY.—*The Intellectual and Moral Enjoyments of Heaven.* The Cotton Manufacture.—Its British History. Improvement of Machinery. Its American History.—Introduction of Steam Power. The Woollen Manufacture.—Its History. The Art of Bleaching. The Art of Dyeing.—Its Origin and Ancient History. VIII. SUNDAY.—*The Social and Religious Enjoyments of Heaven.* The Art of Dyeing.—Its Modern History. Its Chemical Principles.

ARCHITECTURE.

Its Principle. Its original State.—Materials employed. Tools employed. Its Modifications by the Influence of Habit and Religion. IX. SUNDAY.—*The Children of the World wiser than the Children of Light.* Architecture.—Ancient History and Practice.—Egypt.—Thebes. The Pyramids. India.—Excavated Temples. Central Asia.—Tower of Babel, or Temple of Belus. Babylon. Nineveh. Petra. Greece. X. SUNDAY.—*Divine Strength made perfect in Human Weakness.* Rome. The Gothic Style. Britain. Bridges. Aqueducts. Railways. XI. SUNDAY.—*An Autumnal Sabbath Evening.* Prospective Improvement of Locomotive Power. Lighthouses—The Eddystone Lighthouse. The Thames Tunnel.

CLOSE OF AUTUMN.

Miscellaneous Reflections on Autumnal Appearances. 'The Landscape at the Close of Autumn. XII. SUNDAY.—*The Fall of the Leaf.*

GENERAL SUMMARY OF THE ARGUMENT.

Government of the World by General Laws. Government of the World by a Particular Providence. Contrast between Savage and Civilized Life, as regards the Arts. As regards Domestic Comforts. As regards Commerce. As regards Moral Cultivation. XIII. SUNDAY.—"*The Harvest is the End of the World.*"

The preceding ten volumes are now ready for delivery;—and they will be followed, with all due despatch, by the subjoined, among others, provided they are approved by the Board of Education.

LIFE OF WASHINGTON, (with a portrait, and numerous engravings,) by the Rev. CHARLES W. UPHAM, *Author of 'the Life of Sir Henry Vane.'*

THE PURSUIT OF KNOWLEDGE UNDER DIFFICULTIES; in two volumes, with Preface and Notes, by FRANCIS WAYLAND, D. D., *President of Brown University.*

THE PURSUIT OF KNOWLEDGE UNDER DIFFICULTIES, illustrated by incidents in the Lives of AMERICAN INDIVIDUALS; in one volume, with Portraits.

HUMAN PHYSIOLOGY, in two volumes, with illustrative wood cuts, by ROBLEY DUNGLISON, M. D., *Professor of the Institutes of Medicine in the Jefferson Medical College, Philadelphia; Author of 'Elements of Hygiene,' 'The Medical Student,' 'Principles of Medical Practice,' &c. &c.*

CHEMISTRY, with illustrative wood cuts, by BENJAMIN SILLIMAN, M. D., LL. D., *Professor of Chemistry, Mineralogy, &c. in Yale College.*

ASTRONOMY, by DENNISON OLMSTED, *Professor of Natural Philosophy and Astronomy in Yale College.*

This work will be a popular treatise on the Science; it will also enter fully into its history, and consider the subject of Natural Theology, so far as it is related to Astronomy.

NATURAL PHILOSOPHY, by PROFESSOR OLMSTED.

Both of these works will be very fully illustrated by diagrams and wood engravings.

THE USEFUL ARTS, considered in connexion with the Applications of Science; in two volumes, with many cuts, by JACOB BIGELOW, M. D., *Professor of Materia Medica in Harvard University, Author of 'the Elements of Technology,' &c. &c.*

We subjoin a summary of the Topics discussed in the several chapters of this Important Work, that its nature and objects may be the more clearly understood.

CHAPTER I.

Outline of the History of the Arts in Ancient and Modern Times.

Arts of the Egyptians, Assyrians, Jews, Hindoos, Chinese, Greeks, Romans, Dark Ages, Modern Times, Nineteenth Century.

CHAPTER II.

Of the Materials used in the Arts.

Materials from the Mineral Kingdom—Stones and Earths—Marble, Granite, Sicnite, Freestone, Slate, Soapstone, Serpentine, Gypsum, Alabaster, Chalk, Fluor Spar, Flint, Porphyry, Buhrstone, Novaculite, Precious Stones, Emery, Lead, Pumice, Tufa, Peperino, Tripoli, Clay, Asbestos, Cements, Limestone, Puzzolana, Tarras. *Other Cements*—Maltha. *Metals*—Iron, Copper, Lead, Tin, Mercury, Gold, Silver, Platina, Zinc, Antimony, Bismuth, Arsenic, Manganese, Nickel. *Combustibles, &c*—Bitumen, Amber, Coal, Anthracite, Graphite, Peat, Sulphur. *Materials from the Vegetable Kingdom*—Wood, Bark, Oak, Hickory, Ash, Elm, Locust, Wild Cherry, Chestnut, Beech, Basswood, Tulip Tree, Maple, Birch, Button Wood, Persimmon, Black Walnut, Tupelo, Pine, Spruce, Hemlock, White Cedar, Cypress, Larch, Arbor Vitæ, Red Cedar, Willow, Mahogany, Boxwood, Lignum Vitæ, Cork, Hemp, Flax, Cotton, Turpentine, Caoutchouc, Oils, Resins, Starch, Gum. *Materials from the Animal Kingdom*—Skins, Hair, and Fur, Quills and Feathers, Wool, Silk, Bone and Ivory, Horn, Tortoise Shell, Whale Bone, Glue, Oil, Wax, Phosphorus. *Materials used in Painting, Dyeing, and Varnishing.*

CHAPTER III.

Of the Form and Strength of Materials.

Modes of Estimation, Stress and Strain, Resistance, Extension, Compression, Lateral Strain, Stiffness, Tubes, Strength, Place of Strain, Incipient Fracture, Shape of Timber, Torsion, Limit of Bulk, Practical Remarks.

CHAPTER IV.

The Preservation of Materials.

Stones, Metals, Organic Substances, Temperature, Dryness, Wetness, Antiseptics. Timber—Felling, Seasoning. Preservation of Timber.—Preservation of Animal Texture—Embalming, Tanning, Parchment, Catgut, Gold Beater's Skin. Specimens in Natural History—Appert's Process.

CHAPTER V.

Of Dividing and Uniting Materials.

Cohesion. *Modes of Division*—Fracture, Cutting Machines, Penetration, Boring and Drilling, Turning, Attrition, Sawing, Saw Mill, Circular Saw, Crushing, Stamping Mill, Bark Mill, Oil Mill, Sugar Mill, Cider Mill, Grinding, Grist Mill, Color Mill. *Modes of Union*—Insertion, Interposition, Binding, Locking, Cementing, Glueing, Welding, Soldering, Casting, Fluxes, Moulds.

CHAPTER VI.

Of Changing the Color of Materials.

Of Applying Superficial Color—Painting, Colors, Preparation, Application, Crayons, Water Colors, Distemper, Fresco, Encaustic Painting, Oil Painting, Varnishing, Japanning, Polishing, Lacquering, Gilding. *Of Changing Intrinsic Color*—Bleaching, Photogenic Drawing, Dyeing, Mordants, Dyes, Calico Printing.

CHAPTER VII.

The Arts of Writing and Printing.

Letters. Invention of Letters, Arrangement of Letters, Writing Materials, Papyrus, Herculeum, Manuscripts, Parchment, Paper, Instruments, Ink, Copying Machines, Printing, Types, Cases, Sizes, Composing, Imposing, Signatures, Correcting the Press, Press Work, Printing Press, Stereotyping, Machine Printing. History.

CHAPTER VIII.

Arts of Designing and Painting.

Divisions, Perspective, Field of Vision, Distance and Foreshortening, Definitions. Plate II—Problems, Instrumental, Perspective, Mechanical Perspective, Perspectographs, Projections, Isometrical Perspective, Chiaro Oscuro, Light and Shade, Association, Direction of Light, Reflected Light, Expression of Shape. Eyes of a Portrait—Shadows, Aerial Perspective, Coloring, Colors, Shades, Tone, Harmony, Contrast. Remarks.

CHAPTER IX.

Arts of Engraving and Lithography.

Engraving, Origin, Materials, Instruments, Styles, Line, Engraving, Medal Ruling, Stippling, Etching, Mezzo-tinto, Aqua Tinta, Copperplate Printing, Colored Engravings, Steel Engraving, Wood Engraving. Lithography—Principles, Origin, Lithographic Stones, Preparation, Lithographic Ink and Chalk, Mode of Drawing, Etching the Stone, Printing, Printing Ink. Remarks.

CHAPTER X.

Of Sculpture, Modelling, and Casting.

Subjects—Modelling, Casting in Plaster, Bronze Casting, Practice of Sculpture, Materials, Objects of Sculpture, Gem Engraving, Cameos, Intaglios, Mosaic, Scagliola.

CHAPTER XI.

Of Architecture and Building.

Architecture—Elements, Foundations, Column, Wall, Lintel, Arch, Abutments, Arcade, Vault, Dome, Plate I, Roof, Styles of Building, Definitions, Measures, Drawings, Restorations, *Egyptian Style*, *The Chinese Style*, *The Grecian Style*, Orders of Architecture—Doric Order, Ionic Order, Corinthian Order, Caryatides, Grecian Temple, Grecian Theatre, Remarks, Plate IV, *Roman Style*, Tuscan Order, Roman Doric, Roman Ionic, Composite Order, Roman Structures, Remarks, Plate V, *Greco-Gothic Style*, *Saracenic Style*, *Gothic Style*, Definitions, Plate VI, Plate VII, Application.

CHAPTER XII.

Arts of Heating and Ventilation.

Production of Heat—Fuel, Weight of Fuel, Combustible Matter of Fuel, Water in Fuel, Charcoal, *Communication of Heat*, Radiated and Conducted Heat, Fire in the Open Air, Fire Places, Admission of Cold Air, Open Fires, Franklin Stove, Rumford Fire Place, Double Fire Place, Coal Grate, Anthracite Grate, Burns' Grate, Building a Fire, Furnaces, Stoves, Russian Stove, Cockle, Cellar Stoves, and Air Flues, Heating by Water, Heating by Steam, *Retention of Heat*, Causes of Loss, Crevices, Chimneys, Entries and Sky Lights, Windows, *Ventilation*, Objects, Modes, Ventilators, Culverts, Smoky Rooms, Damp Chimneys, Large Fire

Places, Close Rooms, Contiguous Doors, Short Chimneys, Opposite Fire Places, Neighboring Eminences, Turncap, &c., Contiguous Flues, Burning of Smoke.

CHAPTER XIII.

Arts of Illumination.

Flame—Support of Flame, Torches and Candles, Lamps, Reservoirs, Astral Lamp, Hydrostatic Lamps, Automaton Lamp, Mechanical Lamps, Fountain Lamp, Argand Lamp, Reflectors, Hanging of Pictures, Transparency of Flame, Glass Shades, Simulbral Lamp, Measurement of Light, Gas Lights, Coal Gas, Oil Gas, Gasometer, Portable Gas Lights, Safety Lamp, Lamp without Flame, Modes of procuring Light.

CHAPTER XIV.

Arts of Locomotion.

Motion of Animals, Inertia, Aids to Locomotion, Wheel Carriages, Wheels, Rollers, Size of Wheels, Line of Traction, Broad Wheels, Form of Wheels, Axletrees, Springs, Attaching of Horses, Highways, Roads, Pavements, McAdam Roads, Bridges, 1, Wooden Bridges, 2, Stone Bridges, 3, Cast Iron Bridges, 4, Suspension Bridges, 5, Floating Bridges, *Rail Roads*, Edge Railway, Tram Road, Single Rail, Passings, Propelling Power, Locomotive Engines, *Canals*, Embankments, Aqueducts, Tunnels, Gates and Weirs, Locks, Boats, Size of Canals, *Sailing*, Form of a Ship, Keel and Rudder, Effect of the Wind, Stability of a Ship, Steam Boats, *Diving Bell*, Submarine Navigation, *Aerostation*, Balloon, Parachute.

CHAPTER XV.

Elements of Machinery.

Machines, Motion, *Rotary or Circular Motion*, Band Wheels, Rag Wheels, Toothed Wheels, Spiral Gear, Bevel Gear, Crown Wheel, Universal Joint, Perpetual Screw, Brush Wheels, Ratchet Wheel, Distant Rotary Motion, Change of Velocity, Fusee, *Alternate or Reciprocating Motion*, Cams, Crank, Parallel Motion, Sun and Planet Wheel, Inclined Wheel, Epicycloidal Wheel, Rack and Segment, Rack and Pinion, Belt and Segment, Scapements, *Continued Rectilinear Motion*, Band, Rack, Universal Lever, Screw, Change of Direction, Toggle Joint, *Of Engaging and Disengaging Machinery*, *Of Equalizing Motion*, Governor, Fly Wheel, *Friction*, Remarks.

CHAPTER XVI.

Of the Moving Forces used in the Arts.

Sources of Power, Vehicles of Power, *Animal Power*, Men, Horses, *Water Power*, Overshot Wheel, Chain Wheel, Undershot Wheel, Back Water, Besant's Wheel, Lambert's Wheel, Breast Wheel, Horizontal Wheel, Barker's Mill, Wind Power, Vertical Windmill, Adjustment of Sails, Horizontal Windmill, *Steam Power*, Steam, Applications of Steam, By Condensation, By Generation, By Expansion, The Steam Engine, Boiler Appendages, Engine, Noncondensing Engine, Condensing Engines, Description, Expansion, Engines, Valves, Pistons, Parallel Motion, Historical Remarks, Projected Improvements, Rotative Engines, Use of Steam at High Temperatures, Use of Vapors of Low Temperature, Gas Engines, Steam Carriages, Steam Gun, *Gunpowder*, Manufacture, Detonation, Force, Properties of a Gun, Blasting.

CHAPTER XVII.

Arts of Conveying Water.

Of Conducting Water—Aqueducts, Water Pipes, Friction of Pipes, Obstruction of Pipes, Syphon, *Of Raising Water*, Scoop Wheel, Persian Wheel, Noria, Rope Pump, Hydrole, Archimedes' Screw, Spiral Pump, Centrifugal Pump, Common Pumps, Forcing Pumps, Plunger Pump, Delahire's Pump, Hydrostatic Press, Lifting Pump, Bag Pump, Double Acting Pump, Rolling Pump, Eccentric Pump, Arrangement of Pipes, Chain Pump, Schemnitz Vessels, or Hungarian Machine, Hero's Fountain, Atmospheric Machines, Hydraulic Ram, *Of Projecting Water*. Fountains, Fire Engines, Throwing Wheel.

CHAPTER XVIII.

Arts of Combining Flexible Fibres.

Theory of Twisting, Rope Making, *Cotton Manufacture*, Elementary Inventions, Batting, Carding, Drawing, Roving, Spinning, Mule Spinning, Warping, Dressing, Weaving, Twilling, Double Weaving, Cross Weaving, Lace, Carpeting, Tapestry, Velvets, Linens, *Woolens*, *Felting*, *Paper Making*.

CHAPTER XIX.

Arts of Horology.

Sun Dial, Clepsydra, Water Clock, Clock Work, Maintaining Power, Regulating Movement, Pendulum, Balance, Scapement, Description of a Clock, Striking Part, Description of a Watch.

CHAPTER XX.

Arts of Metallurgy.

Extraction of Metals, Assaying, Alloys, *Gold*, Extraction, Cupellation, Parting, Cementation, Alloy, Working, Gold Beating, Gilding on Metals, Gold Wire, *Silver*, Extraction, Working, Coining, Plating, *Copper*, Extraction, Working, Brass, Manufacture, Buttons, Pins, Bronze, *Lead*, Extraction, Manufacture, Sheet Lead, Lead Pipes, Leaden Shot, *Tin*, Block Tin, Tin Plates, Silvering of Mirrors, *Iron*, Smelting, Crude Iron, Casting, Malleable Iron, Forging, Rolling and Slitting, Wire Drawing, Nail Making, Gun Making, Steel, Alloys of Steel, Case Hardening, Tempering, Cutlery.

CHAPTER XXI.

Arts of Vitrification.

Glass, Materials, Crown Glass, Fritting, Melting, Blowing, Annealing, Broad Glass, Flint Glass, Bottle Glass, Cylinder Glass, Plate Glass, Moulding, Pressing, Cutting, Stained Glass, Enamelling, Artificial Gems, Devitrification, Reaumur's Porcelain, Crystallo-Ceramic, Glass Thread, Remarks.

CHAPTER XXII.

Arts of Induration by Heat.

Bricks, Tiles, Terra Cotta, Crucibles, Pottery, Operations, Stone Ware, White Ware, Throwing, Pressing, Casting, Burning, Printing, Glazing, China Ware, European Porcelain, Etruscan Vases.

A FAMILIAR TREATISE ON THE CONSTITUTION OF THE UNITED STATES, by the Hon. JUDGE STORY, LL. D., *Author of 'Commentaries on the Constitution,' &c.*

LIFE OF DR. FRANKLIN.

SELECTIONS FROM THE WRITINGS OF FRANKLIN, by JARED SPARKS, LL. D., *Professor of History in Harvard University, Author of 'the Life and Writings of Washington,' 'the Life and Writings of Franklin,' &c. &c.*

CHRISTIANITY AND KNOWLEDGE, by the Rev. ROYAL ROBBINS.

The design of this Work is to show what Christianity has done for the human intellect, and what that has done for Christianity.

THE LORD OF THE SOIL, OR, PICTURES OF AGRICULTURAL LIFE ; by Rev. WARREN BURTON, *Author of ' The District School as it Was,' &c. &c.*

SCIENCE AND THE ARTS, by the Rev. ALONZO POTTER, D. D., *Professor of Moral Philosophy and Rhetoric, in Union College, Schenectady, N. Y.*

The design of this Work is to call attention to the fact that the Arts are the result of *intelligence*—that they have, each one its *principles* or *theory*—that these principles are furnished by *Science*, and that he, therefore, who would understand the Arts, must know something of Science ; while, on the other hand, he who would see the true power and worth of Science ought to study it in its applications. The work will be made up of *facts*, illustrating and enforcing these views—so arranged as to exhibit the invariable connexion between *processes* in *Art*, and *laws* in *Nature*. The importance of such a work requires no comment.

AGRICULTURE, by the Hon. JUDGE BUEL, of Albany, *Editor of ' the Cultivator.'*

This Work is intended as an aid to the *Young Farmer*, and from the known character of the gentleman who has it in hand, there can be no doubt but that it will be executed in a highly satisfactory manner. The following, among other subjects, will be therein treated of, viz.

1. The Importance of Agriculture to a Nation.
2. Improvement in our Agriculture practicable and necessary.
3. Some of the principles of the new and improved Husbandry.
4. Agriculture considered as an Employment.
5. Earths and Soils.
6. Improvement of the Soil.
7. Analogy between Animal and Vegetable Nutrition.
8. Further Improvement of the Soil.
9. " " by Manures, Animal and Vegetable.
10. " " by Mineral Manures.
11. Principles and Operations of Draining.
12. Principles of Tillage.
13. Operations of Tillage, &c. &c.

Due notice will also be taken of alternating crops, root husbandry, mixed husbandry, the management of pasture and meadow lands, the garden, orchard, &c.

Cuts, illustrative of the various operations spoken of and recommended, will be given.

GEOLOGY AND MINERALOGY, by CHARLES T. JACKSON, M. D., *Geological Surveyor of Maine and Rhode Island.*

STATISTICS OF THE UNITED STATES, by GEORGE TUCKER, *Professor of Moral Philosophy in the University of Virginia, Author of ' the Life of Jefferson,' &c. &c.*

AMERICAN TREES AND PLANTS, used for medicinal and economical purposes and employed in the Arts, with numerous engravings ; by Professor JACOB BIGELOW, *Author of 'Plants of Boston,' 'Medical Botany,' &c. &c.*

MORAL EFFECTS OF INTERNAL IMPROVEMENTS, by ROBERT RANTOUL, Jr., Esq.

LIVES OF THE REFORMERS, by Rev. ROMEO ELTON, *Professor of Languages in Brown University.*

BIOGRAPHICAL SKETCHES OF DISTINGUISHED FEMALES, by Mrs. EMMA C. EMBURY, of *Brooklyn, N. Y.*

SKETCHES OF AMERICAN CHARACTER, by Mrs. SARAH J. HALE, *Editor of 'the Ladies' Book,' Author of the 'Ladies' Wreath,' 'Flora's Interpreter,' &c. &c.*

DO RIGHT AND HAVE RIGHT, by Mrs. ALMIRA H. LINCOLN PHELPS, *Principal of the Literary Department of the Young Ladies' Seminary, at West Chester, Pa., formerly of the Troy Seminary, N. Y., Author of 'Familiar Lectures on Botany,' 'Female Student,' &c.*

The object of this Work may be gathered from the following remarks of Mrs. Phelps. "A popular work on the principles of law, with stories illustrating these principles, might be very profitable to people in common life, as well as to children. The ward cheated by a guardian, the *widow* imposed on by administrators or executors, the *wife* abandoned by a husband, with whom she had trusted her paternal inheritance, the *partner* in business, overreached by his crafty associate, for want of a knowledge of the operations of the law,—all these might be exhibited in such a way as to teach the necessity of legal knowledge to both sexes, and to all ages and classes."

SCENES IN THE LIFE OF JOANNA OF SICILY, by Mrs. E. F. ELLET, of *Columbia, S. C.*

This is written with a view to young readers, and for the purpose of illustrating important historical events.

The Publishers have also in preparation for this Series, a History of the United States, and of other Countries, a History of the Aborigines of our Country, a History of Inventions, Works on Botany, Natural History, &c. &c. Many distinguished writers, not here mentioned, have been engaged, whose names will be in due time announced, although at present, we do not feel at liberty to make them public.

Among the works prepared, and in a state of forwardness, for the *Juvenile Series* are the following, viz.

MEANS AND ENDS, OR SELF TRAINING, by Miss CAROLINE SEDGWICK, *Author of 'The Poor Rich Man, and Rich Poor Man,' 'Live and Let Live,' 'Home,' &c. &c.*

NEW-ENGLAND HISTORICAL SKETCHES, by N. HAWTHORNE, *Author of 'Twice Told Tales,' &c.*

CONVERSATIONS AND STORIES BY THE FIRE SIDE, by Mrs. SARAH J. HALE,

FAILURE NOT RUIN, by HORATIO G. HALE, A. M.

TALES IN PROSE, blending instruction with amusement; by Miss MARY E. LEE, of *Charleston, S. C.*

PICTURES OF EARLY LIFE:—Stories; each inculcating some moral lesson; by Mrs. EMMA C. EMBURY, of *Brooklyn, N. Y.*

FREDERICK HASKELL'S VOYAGE ROUND THE WORLD, by H. G. HALE, A. M., *Philologist to the Exploring Expedition.*

BIOGRAPHY FOR THE YOUNG, by Miss E. ROBINS, *Author of 'American Popular Lessons,' Sequel to the same, &c.*

THE WONDERS OF NATURE, by A. J. STANSBURY, Esq., of *Washington City*; illustrated by numerous cuts.

WORKS OF ART, *by the same*; illustrated by numerous cuts.

PLEASURES OF TASTE, AND OTHER STORIES selected from the Writings of JANE TAYLOR, with a sketch of her life, (and a likeness,) by Mrs. S. J. HALE.

SELECTIONS FROM THE WORKS OF MRS. BARBAULD, *with a Life and Portrait.*

SELECTIONS FROM THE WORKS OF MARIA EDGEWORTH, *with a Life and Portrait.*

SELECTIONS FROM THE WORKS OF MRS. SHERWOOD, *with a Life and Portrait.*

SELECTIONS FROM THE WORKS OF DR. AIKIN, *with a Sketch of his Life,* by Mrs. HALE.

CHEMISTRY FOR BEGINNERS, by BENJAMIN SILLIMAN, Jr., *Assistant in the Department of Chemistry, Mineralogy, and Geology in Yale College*; aided by Professor SILLIMAN.

MY SCHOOLS AND MY TEACHERS, by Mrs. A. H. LINCOLN PHELPS.

The author's design, in this work, is to describe the Common Schools as they were in New-England at the beginning of the present century ; to delineate the peculiar characters of different Teachers ; and to give a sketch of her various school companions, with their progress in after life, endeavoring thereby to show that the child, while at school, is forming the future man, or woman.

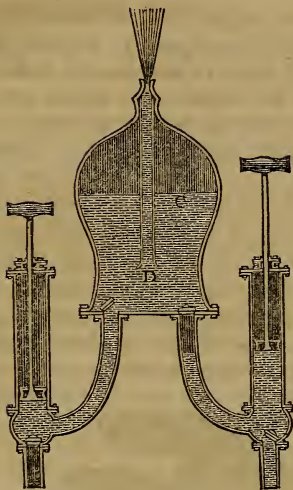
It is not the intention of the Publishers to drive these works through the Press with a railroad speed, in the hope of securing the market, by the multiplicity of the publications cast upon the community ; they rely for patronage, upon the intrinsic merits of the works, and consequently time must be allowed the writers to mature and systematize them. The more surely to admit of this, the two Series will be issued in sets of five and ten volumes at a time. Besides the advantage above alluded to, that will result from such an arrangement, it will place THE SCHOOL LIBRARY within the reach of those Districts, which, from the limited amount of their annual funds, would not otherwise be enabled to procure it.

The works will be printed on paper and with type expressly manufactured for the Library ; will be bound in cloth, with leather backs and corners, having gilt titles upon the backs, and for greater durability, cloth hinges inside of the covers.

The *larger Series* will be furnished to Schools, Academies, &c., at *seventy-five cents* per volume, and the *Juvenile Series* at *forty cents* per volume ; which the Publishers advisedly declare to be cheaper, than any other series of works that can be procured at home or abroad, bearing in mind their high intellectual character, and the style of their mechanical execution.

The Publishers solicit orders from School Committees, Trustees, Teachers, and others, for either or both Series, and wish particular directions *how*, to *whom*, and to *what place* the books shall be forwarded.

Annexed are Specimen Pages of the two Series.

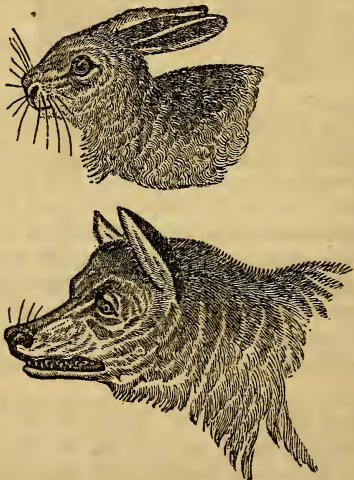


carried into the reservoir, and they fill it half full of water, C ; the mouth of the pipe, D, which is to convey away the water, reaches into the water in the reservoir. As the water rises, the air is compressed : so that, although the pumps act alternately, the elasticity of the contained air acts uninterruptedly in pressing on the surface of the water, and raising it by the tube, D, in an equable stream. The elasticity of the contained air, fills up the interval between the actions of the pumps, and admits of no interruption to the force with which the water is propelled upwards.

Surely these are sufficient indications of the necessity of three powers acting in propelling the blood from the heart. The first, is a sudden and powerful action of the ventricle : the second, is a contraction of the artery, somewhat similar, excited by its distention : the third, though a property independent of life, is a power permitting no interval or alternation ; it is the elasticity of the coats of the artery : and these three powers, duly adjusted, keep up a continued stream in the blood-vessels. It is true, that when an artery is wounded, the blood flows

The superior sagacity of animals which hunt their prey, and which, consequently, depend for their livelihood upon their *nose*, is well known in its use; but not at all known in the organization which produces it.

The external *ears* of beasts of prey, of lions, tigers, wolves, have their trumpet-part, or concavity, standing forward, to seize the sounds which are before them—viz., the sounds of the animals which they pursue or watch. The ears of animals of flight are turned backward, to give notice of the approach of their enemy from behind, whence he may steal upon them unseen. This is a critical distinction, and is mechanical; but it may be suggested, and, I think, not without probability, that it is the effect of continual habit.



[Heads of the hare and wolf, showing the different manner in which the ears are turned.—AM. ED.]

The *eyes* of animals which follow their prey by night, as cats, owls, &c., possess a faculty not given to those of other species, namely, of closing the pupil *entirely*.

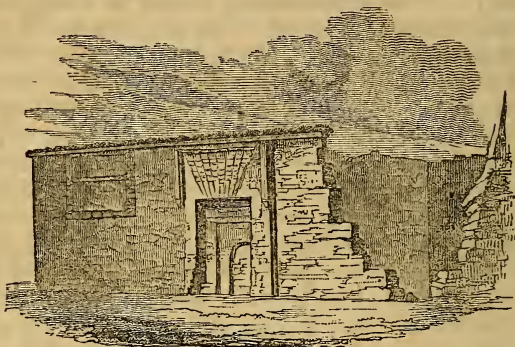
It is difficult even for the imagination to conceive the feelings of such a man, at the moment of so sublime a discovery. What a bewildering crowd of conjectures must have thronged upon his mind, as to the land which lay before him, covered with darkness. That it was fruitful was evident from the vegetables which floated from its shores. He thought, too, that he perceived in the balmy air the fragrance of aromatic groves. The moving light which he had beheld, proved that it was the residence of man. But what were its inhabitants? Were they like those of other parts of the globe; or were they some strange and monstrous race, such as the imagination in those times was prone to give to all remote and unknown regions? Had he come upon some wild island, far in the Indian seas; or was this the famed Cipango itself, the object of his golden fancies? A thousand speculations of the kind must have swarmed upon him, as he watched for the night to pass away; wondering whether the morning light would reveal a savage wilderness, or dawn upon spicy groves, and glittering fanes, and gilded cities, and all the splendors of oriental civilization.

CHAPTER XI.

First Landing of Columbus in the New World.—Cruise among the Bahama Islands.—Discovery of Cuba and Hispaniola. [1492.]

WHEN the day dawned, Columbus saw before him a level and beautiful island, several leagues in extent, of great freshness and verdure, and covered with trees like a continual orchard. Though every thing appeared in the wild luxuriance of untamed nature, yet the island was evidently populous, for the inhabitants were seen issuing from the woods, and running from all parts to the shore. They were all perfectly naked, and from their attitudes

residence of Martin Alonzo or Vicente Yañez Pinzon, in the time of Columbus.



We now arrived at the church of St. George, in the porch of which Columbus first proclaimed to the inhabitants of Palos the order of the sovereigns, that they should furnish him with ships for his great voyage of discovery. This edifice has lately been thoroughly repaired, and, being of solid mason-work, promises to stand for ages, a monument of the discoverers. It stands outside of the village, on the brow of a hill, looking along a little valley toward the river. The remains of a Moorish arch prove it to have been a mosque in former times; just above it, on the crest of the hill, is the ruin of a Moorish castle.

I paused in the porch, and endeavored to recall the interesting scene that had taken place there, when Columbus, accompanied by the zealous friar Juan Perez, caused the public notary to read the royal order in presence of the astonished *alcaldes*, *regidores*, and *alguazils*; but it is difficult to conceive the consternation that must have been struck into so remote a little community, by this sudden apparition of an entire stranger among them, bearing a command that they should put their persons and ships at his disposal, and sail with him away into the unknown wilderness of the ocean.

The interior of the church has nothing remarkable,

work of creation and the work of grace revealed in the word of God. Proofs corroborative of the authenticity of the Bible, have been gathered from those very sources which formerly were applied to by the skeptic for his sharpest weapons; and at this moment, (such is the security with which Christianity may regard the progress of knowledge,) there does not exist in our own country, nor, so far as I am aware, in any other, one philosopher of eminence who has ventured to confront Christianity and philosophy, as manifestly contradictory. May we not venture to hope that, in a very short time, the weak darts of minor spirits, which from time to time are still permitted to assail our bulwarks, will be also quenched, and the glorious Gospel, set free from all the oppositions of science falsely so called, shall walk hand in hand over the earth with a philosophy always growing in humility, because every day becoming more genuine. C. J. C. D.

TWELFTH WEEK—MONDAY.

VEGETABLE SUBSTANCES USED FOR WEAVING.—THE COTTON-PLANT.

THE cotton-plant, another vegetable substance, extensively used in manufactures, differs materially from that already described, in its properties, appearance, and habits. Instead of being generally diffused over temperate climates, it belongs more properly to the torrid zone, and the regions bordering on it; and instead of being chiefly confined to one species, as to its peculiar and useful qualities, its varieties seem scarcely to have any limit, extending from an herb* of a foot or two in height, to a tree†

* *Gossypium herbaceum*, or common herbaceous cotton-plant.

† *Bombax ceiba*, or American silk cotton-tree.—[The Baobab, or *Adansonia digitata*, an enormous and long-lived tree, also belongs to this family. But it is incorrect to call these trees “varieties” of the cotton plant. They are nearly allied to it, indeed, but they stand in different divisions of the great order of *malvaceæ*, or mallows; and the downy contents of their pods are of little use compared with true cotton.—AM. ED.]

Coup de main, (French term,) a military expression, denoting an instantaneous, sudden, unexpected attack upon an enemy.

Dulce et decorum est pro patria mori, It is delightful and glorious to die for one's country.

Effigies Seb. Caboti Angli filii Joannis Caboti militis aurati. As will be seen by the text, where this inscription occurs, (p. 121,) there is an ambiguity in the application of the last two words. The other part of the inscription, may be rendered, "the portrait (or likeness) of Sebastian Cabot, of England, son of John Cabot." *Miles*, or *militis*, means, literally, a warrior, or soldier, or officer of the army; and in the English law, sometimes indicates a knight. *Auratus*, or *aurati*, means gilt, gilded, or decked with gold. *Eques* means a horseman, or knight, who was frequently called *eques auratus*, because, anciently, none but knights were allowed to beautify their armor, and other habiliments, with gold.

En masse, in a body, in the mass, altogether.

Eques, and *Eques auratus*. See *Effigies*.

Fascine, (pl. *fascines*,) a bundle of fagots, or small branches of trees, or sticks of wood, bound together, for filling ditches, &c.

Formula, (pl. *formulae*,) a prescribed form or order.

Geodetic, relating to the art of measuring surfaces.

Gramina, grasses.

Green Mountain Boys, a term applied, during the Revolutionary War, to the inhabitants of Vermont, (Green Mountain,) particularly those who were in the army.

Gymnotus, the electric eel.

Habeas Corpus, "you may have the body." A writ, as it has been aptly termed, of personal freedom; which secures, to any individual, who may be imprisoned, the privilege of having his cause immediately removed to the highest court, that the judges may decide whether there is ground for his imprisonment or not.

Hipparchus, a celebrated mathematician and astronomer of Nicæa, in Bithynia, who died 125 years before the Christian era. He was the first after Thales and Sulpicius Gallus, who found out the exact time of eclipses, of which he made a calculation for 600 years. He is supposed to have been the first, who reduced astronomy to a science, and prosecuted the study of it systematically.

Loyalists, *Royalists*, *Refugees*, and *Tories*. In the times of the Revolution, these terms were used as technical or party names, and were sometimes applied indiscriminately. Strictly speaking, however, *Loyalists*, were those whose feelings or opinions were in favor of the mother country, but who declined taking part in the Revolution; *Royalists*, were those who preferred or favored, a kingly government; *Refugees*, were those who fled from the country and sought the protection of the British; and *Tories*, were those, who actually opposed the war, and took part with the enemy, aiding them by all the means in their power.

Magnetic Variation, a deviation of the needle in the mariner's compass, from an exact North and South direction.

Master-at-arms, an officer appointed to take charge of the small arms in a ship of war, and to teach the officers and crew the exercise of

ring it all the time. Of course I do not make it every time it is wanted, for sometimes, when I want it extra good, I boil and stir it a full hour, and then I put it away in a close vessel and in a cool place. For Raymond, or for any one getting well, and free from fever, I put in a third wheat flour, and half milk. You see it is a very simple process, sir."

"Yes—simple enough. But it is to these simple processes that people will not give their attention."

Mary had the happiness of seeing Raymond sitting up before their parents returned, and when they drove into the great gate, and up the lane, he was in his rocking-chair by the window, watching for them. They had heard of his illness, and were most thankful to find him so far recovered. The Doctor chanced to be present when they arrived. "O, Doctor!" said Mrs. Bond, after the first greetings were over, "how shall I ever be grateful enough to you?"

"I have done very little, Mrs. Bond," replied the honest Doctor. "In Raymond's case, medicine could do little or nothing. Nature had been overtaken, and wanted rest and soothing. Under God, Raymond owes his recovery to Mary."

"O, mother!" exclaimed Raymond, bursting into tears, "she is the best sister in the world!"

"She is the best sister in the *two* worlds!" cried little Grace Bond, a child of five years old.

A source of true comfort and happiness is such a child and such a sister as Mary Bond!—a light

us, as soon as we are missed ; let us keep on and perhaps we may find some other path."

The poor children proceeded on their course, unconscious that every step was taking them deeper in the forest, until, completely bewildered by the thick darkness, and overcome with fatigue, they could go no further. "Let us pray to God, and then we can lie down, and die in peace," said George ; and the innocent children knelt down on the fallen leaves, and lisped their simple prayers, as they were accustomed to do at their mother's side.

"We must try to find some shelter, George," said Kate, as they arose from their knees, "this chill air will kill you, even if we escape the wild beasts." As she spoke, the light of a young moon which faintly illumined the depths of the wood, enabled her to discover a hollow log lying near. Tearing off some branches from the little hemlock tree, she piled them around the log, in such a manner, as to form a sort of penthouse ; and, placing George within the more effectual shelter of the log, she lay down by his side. Worn with fatigue, notwithstanding their fears, the children soon fell into a profound sleep ; and the beams of the morning sun, shining through the branches which formed their covering, first awoke them from their peaceful slumbers.

Their little hearts swelled with gratitude to the merciful God, who had preserved them through the perils of the night, and the morning hymn which was wont to resound within the walls of their