

12,735



# The Higher Education.

AN ADDRESS

DELIVERED BEFORE

## THE LITERARY SOCIETIES

OF THE

COLLEGE OF NEW JERSEY,

BY THE

REV. MELANCTHON W. JACOBUS, D.D., LL.D.

ON

TUESDAY, JUNE 22, 1874.



PRINCETON:  
PRINTED BY C. S. ROBINSON,  
1874.

EXTRACT FROM THE MINUTES OF THE  
CLIOSOPHIC SOCIETY.

CLIO HALL, June 23d, 1874.

RESOLVED, That the thanks of the Society be presented to the REV. DR. JACOBUS, for his eloquent and timely address delivered this morning before the Literary Societies of the College, and that a copy of the same be requested for publication.

WILLIAM A. PACKARD,  
JOHN T. DUFFIELD,  
WM. SANDERSON CHEESMAN.

---

EXTRACT FROM THE MINUTES OF THE  
AMERICAN WHIG SOCIETY.

WHIG HALL, June 23d, 1874.

RESOLVED, That the thanks of the American Whig Society be presented to the REV. MELANCTHON W. JACOBUS, D. D., LL.D., for his able and eloquent address, delivered to-day, and that a copy be requested for publication.

HENRY C. CAMERON,  
CHARLES W. SHIELDS,  
DUDLEY G. WOOTEN.

## ADDRESS.

---

GENTLEMEN OF THE AMERICAN WHIG AND CLIG-  
SOPHIC SOCIETIES.

I am carried back just forty years, to the time when I stood here, a lad among my seniors, and was graduated with my Class of '34. Carnahan, in his quiet dignity and worth, was President—and there was the brilliant Dod, and the learned Torrey, and the scholarly Vethake, and the accomplished and elegant Jas. W. Alexander, and the masterly and magnetic Joseph Henry, and the erudite Stephen Alexander, who still adorns his chair, and the venerable and beloved Vice President, John Maclean, who is also among us to-day, the venerated and honored Ex-President of the Institution. "O King! live for ever."

The Old North College, prison-like as it was before its ordeal of flame, and as it is to-day, graced the Campus, flanked by the Library and the Philosophical Hall, with Mr. Clow's Refectory, and with

the mansions of President and Vice President afront, right and left. East and West Colleges were projected in that time, and the Clio and Whig Halls were set on foot by one of my own class lately deceased, the Rev. Daniel Wells. As yet these Societies were domiciled in the sky-story of the Library, meeting on different nights to avoid crossing each other's path.

The patriotism of the College annually shone out on Independence night with a candle in every window-pane of the Old North front, and with turpentine balls and rockets set flying through the grounds. May I say that her patriotism displays itself in a higher kind of illumination—a light in every window-pane indeed, but the light of living men scattered widely throughout the land and in all lands.

To-day we come up hither to behold what revolution has been wrought here by the quiet energy of taste and money. Honor to the men who have so nobly set their hand to this long needed work. The Gymnasium, the Observatory, the Reunion Hall, the Chapel, Dickinson Hall, the New Library and the Scientific Hall! Honor to the man who with such princely munificence has undertaken these last three imposing structures together. And honor to him, who, not unmindful of the higher culture, as befits

this College, proposes a new and elegant Chapel, to be the Sanctuary of this Institution.

You can see the bulk of a full million of money in these improvements of the College. Honor to the College Head who has so wisely planned and executed the work allowed to him by these munificent appropriations. And we bless God that men of ample wealth and of liberal conception—the merchant princes of our land—are finding out the grandest ends of money—the most truly useful, the most richly profitable and the most really lasting—building to themselves monuments in these enduring edifices they erect, in the large endowments which they institute, and what is more and better, in the gratitude of long generations.

Who could have thought that it would be left to a German merchant of our day, by wealth acquired in commercial industries, and by the inspiration of a zeal for Greek learning, to unbury the ruins of ancient Troy, four cities deep—himself drinking in a new life, where

“ The Attic bird  
Trills her sweet warblings all the Summer long.”

As Athens and Corinth were the eyes of Greece—as Oxford and Cambridge are the eyes of England—as Yale and Harvard are the eyes of New England—so Princeton is set in the forehead of our Middle States to be one of the eyes of America.

Here are all the elements of permanence and of prosperity and of power. With such a record, wrought in the rock of her hard pathway, with such a proud list of her sons adorning our country's history, with such a prestige in the well earned confidence of the people, where can large wealth be better expended than in adding to her facilities for educating the young men of our land? Treasure of New England merchants and of Alumni and patrons in all quarters, has rained down upon Harvard and Yale. And they have steadily multiplied their educational appliances under such public favor. Enlarged Faculties, enriched Libraries and Museums, extended schemes of Instruction by Professors and Tutors in every department, this is their glory! And we claim for our Alma Mater all that generous and ample patronage which shall make her, as she of right ought to be, the first Educational Institution in the land. Princeton needs to-day the enlarged means for aiding her advanced students in pursuing their favorite branches at home and abroad, under her endowed fellowships and scholarships—as the means also of supplying the land with scholars and teachers who shall well maintain the honor of their order. This should be a seat of learning for pilgrim scholars to frequent with their devotions. But the rush of business, the flattering bait of wealth, the pressure of

poverty, all make high learning almost impossible in a land like ours, unless learned livings be provided. And these could be so adjusted as to engage the advancing fellow or scholar, all along, as an instructor also, so that all the talent and acquirement could be well utilized as fast as it is obtained. Our College needs her course to be extended, so as to be fully abreast of the foremost, with all the advanced appointments of our time. She needs the money always to command the highest grade of teaching, and to hold it in a way that shall not be a shame to think of, as a fair compensation. She needs enrichment of her laboratories and museums, and of her philosophic and scientific apparatus. And men of wealth might covet the privilege of cultivating such a field with such a noble and generous soil.

This grand old College of New Jersey, with no pittance of appropriation from the State whose name she bears and honors, and whom she supplies with her men of might—with no portion even of the agricultural grant—must look to her sons, and to her patrons whom she reckons with her sons.

The State, in this age of our commonwealth, cannot be relied upon for the higher education. Her philosophy is the *productive* philosophy. She will amply provide for her Public Schools. She

will even make the District School House her Parish Church, and instead of making education religious, will make education her religion. She may even endow her colleges and universities. But too often it must be upon conditions which would not be safe for the culture of the land. And here are great principles of vast importance at stake, which cannot by any means be yielded.

The State proceeds too commonly upon the theory that education, in its narrow, secular, practical, materialistic sense, works out the conservation of the commonwealth. But there is an education which only makes more potent and damaging the evil spirit of its possessor. And the mere outside training and furniture which supplies with a popular personal power to sway the masses and to wield the government for evil as well as for good, carries with it, and in itself, no salvation for the country. We plead for education, and for education by the State. But we would not stop at such an education as the State will give us. This nation, more than any other, is dependent for her very life upon the well-diffused intelligence of the people in secular affairs. But the higher education must also be provided that shall give a full and complete training to the man in the whole circle of knowledges: in the humanities and the realities together, in mind, body, soul, and estate:

that shall make him better know himself, and better understand human character, and history, and destiny—that shall teach him what man is, and what man has been, and has done, and what he may become, and what all nature is, as an exhibition of her Maker. “Literæ, Amicitia, Mores.” Shall I say then, by way of a passing plea for our noble College so well equipped, that she needs a still better and fuller equipment, that the million or more so lately given and so well expended, calls for millions more in a course of solid culture, that shall well repay with ampler millions in the generations to come.

*Gentlemen of the Societies :*

Standing here to-day where the Temple of Science and the Temple of Religion are provided for together by the munificence of noble men, I may fairly speak to you of THE HIGHER EDUCATION.

“The Scientific Hall,” with grand proportions, walled and roofed—a massive pile—unfinished but steadily approaching to completion, this is the fitting type and exponent of our College to-day. But science, in its true idea, is systematized knowledge, knowledge in its utmost breadth, not narrow and partial knowledge, but universal. For science is not physical science merely, but metaphysical and moral and theological also: not the knowledge of matter only, but the knowledge of mind and soul also as

essential to the personality, and of mind and soul as not matter, but immensely superior to matter.

The subtle materialism which pervades so much the thinking of our time, touches at various points, the great problems of education, narrows the sphere of knowledge and threatens already a subversion of the old educational system.

This is true as respects both the *subject* and the *object* of education.

I. For who is to be educated? What is he? If he be only material, and not spiritual also, only body and not soul—then why is not a first class Gymnasium the proper and sufficient appliance? Then it is muscle that is to be educated. It is the cultivation of tissue and fibre, which, in this view, are not merely the organ of mind but the mind itself. Then indeed, there is the prime absurdity of denying one's proper personality in order to draw out and elevate his personal traits which distinguish him from any other man. Then, indeed, it is tenement and not tenant which is to be informed. It is shell and not kernel which is to be made to grow. Then, as one has said, there is the phenomenon of "soulless professors lecturing to soulless students, to prove that they have no souls, by arguments which are only noisy breath unless they have souls to apprehend and appreciate the arguments."

And if, as this thinking maintains, the man is only a superior brute, with the spirit of the brute that goeth downward, what need we for a college but a well-appointed Menagerie, arranged according to the respective habitats, and fitted up with its adaptation to the instincts of each?

Or if, as some will have it, the man is only what he eats--determined in all his mental and moral characteristics by the food he masticates, then surely we are to institute the modern curriculum on the basis of a first-class Restaurant, where the education shall be by means of the diets, selected and graduated to produce certain aptitudes and faculties for success in the several pursuits. And the philosophic faculty is to be made by one bill of fare, and the artistic faculty by another, and the industrial faculty by another, and the course of food is the curriculum, one course to produce the soldier and another the scholar, one the savant and the other the servant.

And this leads me to advert, in passing, to a kindred error in the modern education that mistakes *cram* for culture--that drives the machine by such high pressure and at so many miles an hour as jeopardds everything on board. This is truly materialistic. It is not education in any proper sense. It is stuffing, not drawing out the man. It surfeits him so as to make the study a disgust, until the intel-

lectual dyspeptic rejects his proper food. It makes the curriculum a race-course and never is done with the lash and the spur until the end is reached. The student may be driven mad by such a process, or he may be overtasked to his death. Or at best he will long to get out of the strait-jacket and prison life of the college, with its *ding, dong, bell*, and go to the polytechnic or university to pursue his favorite branches at his will.

But I proceed to maintain that "scientific theories of matter and of life, all have ethical relations and consequences. These are assumed in politics and law, in the sciences of natural right and of social obligation. And any community must soon feel that literary institution to be a positive scourge, in which a sceptical science relaxes (if it does not deny) all the moral obligations which spring from a true faith." I see in the drift of modern thought perils imminent to our educational systems. The subtle poison is in the atmosphere. It is breathed in the magazine, in the lecture, in the newspapers. The revolution is actually going on. And these perils can be best provided against by enriching and strengthening such a college as this. We maintain the catholicity and authority of science. *It is not the believer who cripples and restricts scientific research. It is the unbeliever who confines it to the*

*narrowest spheres of sense and grovels along with it there.* And as the President of Yale has well said "the present aspects of society at home and abroad are compelling thoughtful men to ask, whether the practical relaxing of the bonds of duty among men of culture and education is not the result of a more or less distinctly acknowledged theoretical scepticism." Plain enough is it that the sceptical scientist who will have nothing to do with a personal, primal cause in Nature, cannot teach a true science.

Look at the new programme of scientific education as already announced.

"The connection of man with the lower animals shall form the basis of a new system of psychology. Mental science will start on a new track in search of other objects than our metaphysicians have hitherto kept in view. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown upon the origin of man and his history. And here is a theory involving a complete overthrow of a system of mental science in which mind is regarded as a substance distinct from the body." Can any education be lower than this?

I have stood on the top of the Righi when far below on the beautiful Lake Lucerne, the cloud had settled like a roof over a portion of the waters, and you

could see the tiny steamer ploughing its way to where it entered under the cloud, the passengers shrinking at the chill and darkness, and not at all considering the higher realm of thought and observation above them. So I have seen a child trying to pick up a patch of sunshine from the carpet. It was there. But it did not belong to the things which may be handled.

Such a theory of knowledge as we have referred to, confounds the distinctions of thought, and utterly bewilders all investigation. Not satisfied with discarding traditional assumptions, it demands mathematical proof of that which is not at all subject to such analysis. As if one should require of his son to prove his filial temper by the algebra—to take the square root of an affection—to work out his demonstrations of fidelity upon the blackboard, and to differentiate the right and wrong of his conduct by the calculus.

We call for more of science, not for less. We protest against narrowing the circle of the sciences so as to exclude the higher realms of thought. We plead for science in its widest sphere, beyond the mere material phenomena, for science above the analysis of the laboratory, or the scope of the anatomist. Has it come to this, that brain work is to be measured by the inch, according to the correlation of physical

forces? Shall we have its value then computed by the yard, or shall we have its horse-power calculated, for driving an engine, or governing a state? That education must be halfway and one-sided that so dwarfs and belittles science as to confine it to sensible objects. That is indeed, sensation without reflection. Here, "science" pleads for ignorance.

Take the scientific methods, as applied, for example, to the worlds beyond our reach. You have the spectroscope, and you credit that wonderful instrument, as it reveals to you, by the colored lines which their atmospheres cast upon the canvas, what are the materials out of which those starry orbs are built. And here are the lines of light, which are cast by the atmosphere of that spirit-world upon the inspired page, and which reveal to our consciousness its very constituent elements. There was a time when nothing but driftwood floating on the ocean currents indicated to men the existence of this continent as a possible or probable fact. And then a daring navigator carried back the testimony of it as something seen by himself, and this was credited. And such testimonies and proofs we have had of a world beyond the stars belonging to our spiritual system. And why should they not in like manner constrain our belief? I have stood in the old Cathedral at Pisa, under the chandelier where Galileo gazed

and where he discovered the proof of the earth's motion. And I have thought how strikingly typical it was, that in the apex of that sanctuary nave, high arching towards the sky, there was fixed the strong staple from which that grand demonstration was hung. So much for the *experimental method*. And is experiment more than experience?

And now if we apply the favorite *historical method* of the modern school what have we? We have the documents in the most ancient and corroborative form, of manifold record, which give us the history of the supernatural along with the common items of the day. And these histories belonging to the most enlightened age, and current in the most learned communities of Greek and Roman culture, attested by letters to the chief cities of the world and with every element of authentication. Why should the historical method, so vaunted, be ruled out here, and only here? as if history could be voted unhistorical, and turned to fable, at will. Science calculates transits and eclipses, and properly glorifies her methods of positive knowledge from data of natural law. But here we have the very time-tables according to which the years of history have been kept from the beginning, and have been noted centuries beforehand, with unerring accuracy. And now to deny the document, or to question the date because of the data, would

be quite as disingenuous as it would be to challenge the scholars who have gone out to the ends of the earth to watch the transit of Venus.

For truth, shining out upon us from the sky belongs to no age, nation or language exclusively, but to all alike. All tongues and peoples owe it equal homage, and are bound to plant themselves where they can best find it out.

Proctor says, "What if our eyes were telescopes!" Yes! What if they were such telescopes as "substantiate the things hoped for, and evidence the things not seen."

And here is THE BOOK, which is unlike any other book—so confessedly above them all—unaccountable altogether except upon the supposition of its higher origin and substance—dealing with science long before science was born—so anticipating the findings of science without an error, long ages before science began, as to prove that it was the product of His mind who gave to science birth; the Book which gives the history of all history—the only original account of all origins—the table of the races and the order and genesis of populations, and the birth and growth of languages—the Book from which the greatest authors of all ages have drawn their inspirations—which has furnished subjects to the highest art—which has been more criticised and

searched into than all other books together—its jots and tittles, its sentences and syllables counted and memorized until it could be reproduced from the books and brains of its adherents if every copy of it were given to the flames—which has been persecuted as if it had been an invading army of savages, but which will not down at any word of authority and power. You are asked to pronounce this Book a fable, and the Religion which it reveals, a fallacy and falsity. But the name it heralds to the world is to-day the Name above every name.

And here I would put in a plea for the study of this earliest and noblest classic, as being itself the fountain of learning—as having all science and all philosophy and all literature here in the germ. I would have it studied in both of its wonderful languages as part of the college curriculum. Books more stirring than Homer, more touching than the Medea, more lovely than Virgil are here.

But as there can be no true culture, without a true *cultus*, a true ideal and object of worship, what must come of a culture that worships a blind and unintelligent force? Can we be educated by the new system, to love a set of forces? a set of galvanic forces, a set of vital forces? The ancient heathenism that worshipped the powers of nature, at least personified them. It was the Sun-

God. It was the spirit under the leaf, and in the flower, and in the stalk of grain. And yet that culture so defective, upwards, was bondage and dark night upon the soul and upon all their social institutions. It was when Greece and Rome had a culture that struggled towards a divine Personality which they could freely invoke, that there came forth whatever was admirable in the higher classic culture.

I have walked through Plato's Grove of *Academy*, and have plucked the solitary orange blossom from the deserted field, and I have thought how the great teacher has been superseded by the greater, and how the *φιλοσοφία* has given way to the *σοφία*, the *λογος*, the *θεανθρωπος*.

And ask a moment, if you will have aw, what is the inevitable law of such a belief or nonbelief worked out in the popular education? It is a law of moral gravitation issuing in all debasement and despair. Rejecting a Divine Personality and with it all personal accountability, every man a law to himself, no binding obligations, no fear of retribution in the future world, no sanctity of an oath, no moral forces left, justice a farce, and not a force, the world is chaos. Positivism becomes blank negativism. The spirit of the age becomes utter lawlessness. To command it by law, must then be

——“ As bootless,  
As to send precepts to Leviathan  
To come ashore.”

But this modern thought that will repudiate most of all any Supreme Personality, offers to our modern civilization a worse than heathen development. Savage barbarism in society is the sure result. Not even the Great Spirit of the Indian becomes a restraint upon the evil passions of men. Give us back the Pantheon and the Parthenon, gods and goddesses without number, rather than none, rather than this negation of all cultus and true culture together.

Stop a moment, and ask what culture this modern thought has produced. What poem has it written? What world-renowned masterpiece of art has it brought forth? What Handel or Beethoven has it produced in music? What Angelo with easel or chisel? What idol even, has it cast like the Athenian Pallas, for its worship? A statue of Minerva, indeed, but overtopping it, and as the only object to be seen from afar, the golden tip of her spear.

II. But this materialism in the modern thought, shows itself also, in limiting the *object* of education; in demanding that the culture shall be such only as shall directly subserve the material interests. The true end of education is not what the man shall most do, but what he shall most be, and this too, in order that

he may most and best do the part assigned to him. It is character more than calling. Character first and calling next. Not to get tools, so much as to become himself the superior instrument or agent for all the work of life. In an age like ours, and especially in a land like ours, where material values are the high prizes of life to the multitude, it is no marvel if old barriers should be broken down in our educational systems. It is seen that the practical talent is that which succeeds; that mere scholarship, however prized by the possessor, does not win the chief prizes of our day. It is even said that high learning is often positively in the way of one's success in life; may so smooth and polish a man as to make him a poor wrestler for promotion in every day affairs. It is even asserted, and is true in a sense, that "the greatest men in the world have not been the elegant and refined scholars of their time—that Brindley and Stephenson, for example, the men who gave to Britain her canals and railways, did not read and write till they were twenty years of age." But surely this is no argument for postponing one's elementary learning till his majority. It is said also that "D'Israeli, with all his literary resources, never laid down a line of state policy that was not scouted, while Sir Robert Peel, whose speeches were the heaviest platitudes and whose quotations were commonly from

the Eton grammar, reversed his country's financial policy, regenerated Ireland, and died with the blessing of all England on his head." But what does this prove against the most liberal culture for a man as part of his training in life? D'Israeli's learning did not come out of the University. And those uncultured magnates would have achieved much more, with all the accessories of educated power. And unless the learned failures are traceable to the learning, then nothing is proved except that only their exalted scholarship saved them from being failures altogether.

It has been charged that the high education "rifles the cannon until the strength of the metal is gone." But if the metal was of poor stuff, or lacking in careful preparation for the strain upon it, then rifled or unrifled, it would have burst at the first discharge. Power is the popular criterion. And it is recited as a stunning fact, that "he who wielded our government with the strongest hand, is pronounced by his biographer to have been the most ignorant man in the world." But is this a plea for ignorance? I know that La Place was accused by Napoleon of always searching after subtleties—that his ideas were problems and that he carried the spirit of the infinitesimal calculus into the management of business. Yet this was no fault of the calculus, but only of its application. I know that, as is said of Sir John Hunter,

men may be ignorant of the dead languages, and yet may be able to teach those who sneer at their ignorance that which they never knew in any language dead or living. But is that an argument against the classics in education? No! But to-day that learning is sought with most avidity which graduates a man as a railroad president or bank president upon the fattest living. And not the rings of the planets are studied half so much as the municipal or state *rings* of the contractor. Where are the college graduates to-day in the foremost ranks of learning pushing forward literary enterprises, controlling our public schools, and guarding all our educational interests? Alas! "One to his farm, another to his merchandise." I have lately seen it alleged that for the last twenty years no graduate of our American colleges has risen to fame as an orator, a poet, a statesman, or an historian, or in either of the learned professions. And even if this be so, why is it except that the public mind has so set itself to the new methods as to turn aside the course of popular education from the ideal to the practical, and to merge it in business affairs. I see it stated that the greatest warfare of the nineteenth century, is the industrial warfare — the struggle between the great nations for supremacy in the various industries. And out of this legitimate strife come the great World's Fairs of Sydenham, Paris,

Vienna, and the Centennial of Philadelphia. And out of such a want come the Cornell and Michigan Universities. Plainly enough the industries of the country claim to be developed. There is a training that is adapted to this. Let it go forward. Let wealth and talent be applied in this direction also. Let the masses enjoy the freest, fullest benefit of such a practical education for pursuing their chosen specialties. But give us the old college, which should not be superseded, but which may be enriched and enlarged in its appliances and its apparatus, so as to become an university only more universal than hitherto.

The National Education applies itself to the industrial and mechanic arts and to the natural sciences, as being the kind of culture which the nation needs, for the development of her material resources. And that branch of learning is emphasized which best enables the man to make profitable adventures, and to turn his industries to most direct and valuable account. What wonder that men become impatient of the old routine, when it seems chiefly useful for a well rounded and symmetrical culture of the whole man, and pays, not in cash, but only in credit. Or what wonder that the time is counted lost for business which is spent in college, because it does not directly tell upon a man's trade and profits? When the

School of Design turns out a draughtsman whose salary in a silverware establishment, for patterns and artistic devices, is equal to that of the governor of New York, what wonder that this becomes the "liberal education" in the accepted sense, and that such callings take the place of the learned professions? Profit is good. Utility is good. To make two blades of grass grow where only one grew before—to produce sixty bushels of corn to the acre—to know the composition of soils so as to raise the largest crops—these are valuable acquirements, and they have a place in the culture of the nation. But the college course is not superseded by these, nor is this agricultural training incompatible with the old curriculum.

Before the Advent it was given to men to solve the highest problems of truth by worldly wisdom put to the utmost tests. The trial was a conspicuous failure. The world, by wisdom, instead of attaining to knowledge of highest truth, attained to ignorance of it. In the midst of all the mental illumination of the Porch and the Academy, the altar at Athens had on it the tantalizing inscription, *Ἀγνοῶστω θεῶ.*

Since the Advent, it is left to the race to solve the same grand universal problem by the appliances of worldly power—to find out what the utmost achievements of physical forces can do in the steam and the lightning, in the mine and the factory and the labo-

ratory; to gather up all material resources and to find out what the power of labor can do, and the power of trade, and the power of wealth, and the power of armies, and the power of governments—what is the power of the masses, and the power of crafts, and the power of councils, and the power of diplomacies and courts, and cabinets, to solve the great world problem. This is the operation that is now going on. Here is the huge system that exalts material resources as the sphere for the highest development of mankind and which calls forth the sublimest energy of men in the race for perishable wealth. The mind is surcharged with material aims and schemes, until what wonder if the mind itself becomes materialized, and if it seems to the average man that matter is mind, or mind is matter, no matter which, and that there is nothing higher to be gained than mammon. Here and there a High Priest of learning discards the gilded prize, and like the great Agassiz, says, "I have no time to make money." Yet this very word from such lips is an imperial summons, to which men of money respond. And the wand of such a Magician turns even the stones into gold for his freest service.

But the tendency of speculative thought which we have indicated, works itself out in the severely practical direction. The applied sciences become

the attractive field of study with many, as applied for gain. The "liberal education" is that which commands the most liberal pay. The classics as they serve mainly to discipline the mind, are coming to be disparaged, as having no practical use beyond the reading of a druggist's label or a physician's recipe. The learned professions come to be considered chiefly in the light of their productive-ness in money. And a man's *works* forsooth, are not any more his volumes as an author. They are his factories, as a proprietor and producer—his cotton works, or iron works. And so also what a man is *worth* is not his moral value, but his estimated accumulation in dollars and cents. And a man's securities, so called, are the instruments by which, not himself is secured at all, but only his revenue. And so our very vocabulary bears the traces of the misconception. But the highest knowledge is the knowledge of Him in whom all truth culminates—whose Son is King of truth, and the Truth itself, and who rallies to His side all those who are of the truth and who therefore respond to His voice. Intellect, alone, cannot rule the world. Even in this presence of the learned, and on this height of learning, I may say it and challenge contradiction. The mere intellect may be so debauched by a degraded materialism as to sink its possessor in the deepest mire of the streets.

Scripture and history both reverse the world's judgment in making mental culture wholly incommensurate in importance with spiritual growth. Even Goethe, the High Priest of culture, said he never had a happy day in all his life. But the world is crazed to-day with the greed of gain. Financial problems are the prime questions of state. And the experiment will be made, however desperately, by the age in which we live, to prove what the world by power can attain towards the ultimate and perfect good.

Power of industry, and power of machinery—power of combinations—power of the pen, and of the sword—power of the press, and of the purse—it will all be tried, to solve the world's chief problems by worldly power. The higher learning may for the time be disparaged and debased by this rush after wealth. The great teachers in our colleges and universities may go begging, as offering no wares that will find ready market, and the ministers of religion may be turned out to starve as having nothing for the multitude that will command a price. But this experiment of power will be another failure. And it will be written, after the centuries of striving and of drudging for wealth, like as it was written at the Advent—"The world by power knew not God."

In 1813, only a little more than three score years ago, there occurred a pair of events most truly typical. Robert Fulton was applying steam to the first ferry boat on the Hudson to connect the metropolis with what is now the sister city of Brooklyn. And, at the same time, in Massachusetts, men were laying holy hands upon the first American missionaries to the heathen. What the material force has achieved in these three score years, binding the continents together, making the ocean passages great ferries across—revolutionizing industries, stimulating commerce, and bringing the ends of the earth to our feet, the highest arithmetic cannot calculate. What that simple, single power of the steam engine has added to the world's forces and resources in this period no man can compute. Yet no steamer nor rail car has ever carried a man to Heaven.

But calculate, if you can, what has been accomplished in the same interval by the spiritual forces which the other agency has set in operation. Nations lifted up from the debasement of barbarism and put forward on a grand career of christian civilization, and the moral face of entire communities wholly changed. These are values not to be computed by figures, not quoted on the exchange lists, nor sold in the markets.

But if the Cosmos is only "a set of ponderous stamps and hammers and jagged iron wheels, where man, as a helpless and defenceless creature, is liable to be crushed to powder by a sudden, senseless whirl of the machinery"—if, as Parton has it, "our race is tossed about on this round ball of earth, naked and shelterless, and sent shivering through space—*why* we don't know, and *whence* we don't know, and *whither* we don't know,"—then what is Science but a curious and bootless search into the massive mechanism that gives one no answer to his queries, but whirls him into dust while he is studying its parts? This is stark heathenism back again—where man is destined to be

—" Seal'd amid the iron hills,  
To be imprison'd in the viewless winds,  
And blown with reckless violence about  
The pendent world."

Or if, as certain modern apostles of science will have it, the whole domain of spiritual truth is unknown to them—the unspeakable riches of that realm of thought which includes all supersensual existence and essence,—then we must accept their confession of ignorance. But they know no hope for mankind, and they rob the world of its only consolation.

If man is proved to be a wondrous mechanism—then surely the more mechanism, the more mechanic—

the more machine, the more machinist. And this conscious mechanism—which is not a mere puppet, however mechanically the arterial and nervous systems may act—supposes a Supreme Personality, of mind and will, by whom it is produced and to whom it is responsible.

But, Gentlemen, we know of what is in the future, as statesmen and savans do not know, and cannot tell. We know of what is the rising star of empire, and of who is the coming Man and the coming King. We know of an eclipse in which the sun will go out in darkness; of a transit in which the heavens themselves shall pass away. And men of all nations and tongues are watching with instruments which the ages have well proved in the hands of the great and the good, according to the highest science. Meanwhile we hail all scientific discoveries and appliances. And a true science with all her train, will yet come up, like the Magi, with her offerings of gold and incense together—and will pay devout homage to Him who is no longer in the cradle, but on the throne, the King and Head of our Humanity.