

Tuttle, J. F.

PHYSICAL SCIENCE AND CHRISTIANITY:

A

Baccalaureate Discourse,

DELIVERED AT

WABASH COLLEGE,

CRAWFORDSVILLE, IND

BY JOSEPH F. <sup>Furness</sup> TUTTLE, PRESIDENT,

June 22, 1873.



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Rev. Joseph F. Tuttle, D.D.,  
Pres. of Wash. College,  
Cranfordville, Ind.

## Dedicated

TO THE  
MEMBERS OF THE SENIOR CLASS,

For whom it was Prepared, viz:

CRANE, BENJAMIN,  
CRONKHITE, PHILANDER CONSTANTINE,  
FRAZER, WILLIAM DEFREES,  
GREENE, CLARENCE ABIEL,  
HIATT, JOEL WILLIS,  
IDDINGS, FRANCIS WAYLAND,  
JENNINGS, JOHN OLIVER,  
KANOUSE, CHARLES ALBERT,  
MARSHALL, THOMAS RILEY,  
McCONNELL, IRA  
MILLIGAN, HARRY JOSEPH,  
RICE, EDWIN JAY,  
RIPLEY, WARWICK HAWLEY,  
STANLEY, FREDERICK JONTE,  
THOMAS, LESLIE DAVIS,  
WARD, SAMUEL LAWRENCE,  
WHITEHEAD, COLUMBUS DELANO.  
WILSON, GEORGE WASHINGTON,  
DETCHEON, IRWIN AGNEW,  
KENT, WILLIAM HITCHENS,  
PERRY, HENRY MITCHELL,

## DISCOURSE.

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“Beware lest any man spoil you through philosophy.” Col. 2: 8.

The Greek philosophers mocked at christianity as an absurd system, and they enslaved or spoiled many with the same belief.

The scientists of our day—at least many of them—are close imitators of the philosophers of Paul’s day, and not content with skepticism as regards Christianity, they often institute unfriendly comparisons between physical science with its contents and evidences, and christianity with its contents and evidences. The former is alike useful and demonstrable, its “beliefs are such as can be verified scientifically:” the latter—especially in the cosmogony and chronology of the Old Testament and the memoirs of the life of Jesus in the New—is alike puerile, and unreasonable. The scientists assume nothing but demonstrate everything; the friends of christianity assume everything and demonstrate nothing. These over-modest philosophers flout christianity, and demand such proof for certain alleged facts in it as Newton gives of the law of gravitation, or Euclid of a theme in geometry. No man of sense would dare make such a claim in regard to the history of Alexander the Great, or Washington, and yet some scientists urge this claim in regard to christianity. They say, “*demonstrate* the alleged facts of Christ’s incarnation, miracles, and resurrection, and we will believe!”

That physical science is thus contrasted with christianity in a manner plainly evincing the hostility of certain scientists, I need not stop to prove but in view of it I have selected as my theme the words of Paul, “Beware lest any man spoil you through philosophy.”

I do not propose to construct an elaborate answer to these

skeptical scientists, but in three particulars to examine this comparison between physical science and christianity.

In the first place let me compare the *advocates* of the two contrasted systems, the scientists and the christian defenders. You will not wrong me with the suspicion that I can view the triumphs of physical science without intense admiration. Who can refrain from the warmest approbation as these men are saying to every alleged fact in the material world, "be one thing or the other; come out as a solid truth, or disappear as a convicted lie?" I pity the man who can glance over the achievements of modern science without a flush of honest pride. And yet are these men more faithful to truth or more earnest in their search for it than the defenders of christianity? Do you mention men who have sought and found remedies for disease? Is either of these more honest and diligent in his search than any one of a thousand christian scholars searching into the evidences of the system on which hangs their hope of heaven? You speak of Tycho Brahe and Kepler observing and recording the facts of astronomy in order to ascertain the laws which regulate them. I match with them the christian scribes of the dark ages who in their secluded retreats spent their lives in copying the Holy Books. So faithful and conscientious were they in this work that they preferred to destroy an entire manuscript rather than perpetuate in it a single error. Think of such a man who from weariness had made a wrong motion of his pen, or had inserted an intruding word, and yet for that slight error he burns the work of years. Did any scientist ever exceed these devout copyists in their zeal for truth?

Astronomy is regarded as the most exactly defined of the sciences, and the devotion of its scholars is marvelous. With what keen perception have they noted the facts, with what vast imagination and reasoning have they traced the paths of the stars, and weighed the worlds! What miracles of genius are associated with this science! What a spectacle do these astronomers present when observing a total eclipse

of the sun from a thousand points noting each fact in those minutes of glory from the sun's entrance into the shadow until buried in the deepest darkness it suddenly flames with the supernal glories of the corona! Great men! beautiful enthusiasm! magnificent achievements!

And yet have these men as a class exceeded the scholars who have devoted their gifts, scholarship and lives to the study of the facts and books, and proofs of Christianity? Has any one of them bestowed more honest toil to discover the laws of astronomy than Dr. Lardner did to authenticate the claims of every verse in the Greek Testament, with rare learning examining the works of "the Christian Fathers" so minutely that he is said to have found every verse of the New Testament quoted by them? Has Newton, or Kepler, or LaPlace, proved himself a more enthusiastic devotee of this science than Tischendorff who has devoted his vast talent, scholarship and life, to an examination of the manuscripts of the Greek Testament? Neither science nor letters furnishes a superior devotion to a single grand idea. What iron patience to decipher a manuscript of the 5th century, whose letters had been washed off in the 12th century to receive the pen-marks of an old monk, and to restore the faded and almost invisible letters, was displayed by this man! What enthusiasm must have inspired him to visit royal courts and the great libraries of Europe, and to make three dangerous and weary journeys to search for manuscripts in the very deserts of Arabia! What scientist ever matched the man that thus found the Sinaitic manuscript, and by it has authenticated the sacred books, as no other ancient records have been!

In respect to fidelity, enthusiasm, learning, and clearly proved results, the men who have believed christianity and developed the grounds of their faith are in no wise inferior to the men who have devoted themselves, to the investigations of natural science. If we compare the two classes which have been thus brought together, the cause of christianity does not suffer, nor does the comparison afford any

reason why we should surrender ourselves as captives to a sneering materialism as preached by our modern philosophers.

In the *Second* place let me speak of the *assumptions* made by these two classes in their discussions of physical science and christianity.

Philosophy is the knowledge of facts and their causes. Our scientists sometimes talk as if there is no philosophy but that which deals with crucibles and retorts, with telescopes and microscopes, stratifications of the earth, and "the geology of the stars." But are there no facts of history for which philosophy must assign adequate causes? May we not to the phenomena of mind, and spirit, as truly as to those of matter, apply Bacon's fine saying, "When *things* are known we can knit them to their causes?"

The modest skeptics of the modern school claim that they demonstrate each dictum of science, and they mock at the advocates of the christian religion because they *assume* as true what they cannot *prove* to be true.

Is this true? That peerless scientific experimenter, Faraday "believed the human heart to be swayed by a power to which science or logic opened no approach," and this great man once modestly said concerning some investigations he had been making, "I think it likely I have made many mistakes in the preceding pages." Once the philosophy of Franklin was accepted as explaining the facts of electricity; but who now accepts his "demonstrations?" There are several theories, connected with that "darkest mystery of the universe, *light*," which scientists once regarded as proved but they are now abandoned. The highest authority on light and heat *assumes* that heat is motion, and light proceeds in waves through an *ETHER* everywhere diffused through space but so rare, so subtle, so intangible as to baffle all efforts to discern it. Another tells us about the composition, the contents, the forces, and the changes of the sun, and demonstrates their causes. Such forces reside in the Sun that its spots are produced by "winds of great violence and some-

times whirling storms like those in our own atmosphere." "The up-rush of heated gases from the central mass of the sun" or some other force one day shot certain "filaments" of the sun at the average rate of 250 miles a second from a point 100,000 miles above the sun's surface to a point 200,000 miles above it! and its initial velocity must have been 500 miles a second, or 1200 times faster than a cannon ball can travel! A bolt of ice 45 miles in diameter and 200,000 miles in length shot with the velocity of light at the Sun, would be melted before reaching the Sun, if the Sun's heat could be concentrated on it! And if the Sun were surrounded with a shell of ice having the same diameter as the earth's orbit and one inch thick, so hot is the Sun, that this immense sphere of ice would be melted in just two hours and twelve minutes!

There is no imagination of Byron as to the extinguishment of the Sun, nor of that scientific lunatic who demonstrated the existence of the famous "Symmes' Hole" at the earth's pole, which is less susceptible of demonstration than many of these theories which the scientists give to the world as *philosophy*, facts and their causes!

Another philosopher has found that a nettle, a dog, and a man, the whole vegetable and animal kingdoms, have a "formal basis of life" in a colorless fluid full of rapidly moving granules. In this is life and out of it are developed the infinite varieties of vegetation and animals. It is true this wonderful demonstration is given by the microscope in "a microscopic hair of a plant" containing "channels so minute that the best microscopes show only their effects and not themselves!"

Another famous scientist "demonstrates" that all life is to be traced to "a primordial germ from which he conceives the amazing richness and variety of life upon the earth's surface might be deduced." And so we have science in one case "assuming nothing but demonstrating," that "protoplasm," a limpid liquid full of granules is the origin of all life, and



in the other that "the primordial germ" is so potent that not only can it convert "carbonic acid, water, and ammonia" into nettles, dogs, and men, but can create itself! Glory to "protoplasm" and the "primordial germ!" and down with God, that unproveable myth of the Bible! Indeed, if we have only protoplasm and the primordial germ, we can say with some other fools, "there is no God!"

I have said that philosophy is the knowledge of facts and their causes. And is this science so demonstrable as to justify a man in being dogmatic whilst examining a "microscopic hair," or some fact in a sun 95,000,000 of miles away through a spectroscope? Is all this paraded assumption as to the genesis of matter and life so much more reasonable than that old statement that GOD CREATED these things by the word of his power?

I have been speaking of the *assumptions* of science. Four years ago a scientist displayed a perfect human skull before a scientific association. Although his statement was denounced as false in fact by a man who gave his reasons, the lecturer declared that this skull was found in the *tertiary*, and therefore belonged to an age vastly anterior to that alleged in the Bible. One enthusiastic philosopher—assuming nothing—concluded that man had been on the earth at least 70,000 years, and another—also assuming nothing—regarded it as proved that man was a dweller here 140,000 years ago! Of course, the Mosaic story is a myth, or not to make the point too fine, a lie!

And yet the old skull said nothing. And I noted also that these *demonstrators* of man's age and origin did not make account of the fact, that this venerable skull, alleged to be so old, was as perfect as any in that room; in fact, that what we in our simplicity have so often demanded of the Darwinians, and Protoplasmers, is never found, "a fearfully and wonderfully *half-made* man!"

Not many years ago Leibig "demonstrated" that a man cannot stir a muscle or think ever so little a thought without

consuming muscular tissue through the process of oxidation, and now this "demonstration" is damaged by another that *fat* furnishes muscular force. And very recently a scientist strives to account for the power of reminiscence as shown in the fear excited in a chicken by the cry of a hawk, and the fear which a half-grown dog has of butchers and butcher shops, by alleging that certain "molecular changes" must have taken place in the brains of the ancestors of the chick and the pup! And this is gravely published as among the marvelous discoveries of physical science!

Yes, this is philosophy. Here is no draft on the imagination for facts, and no jumping at the conclusion. "The old traditional scheme of the Bible" with an infinite God as its central force and cause is set aside, and in its place we have philosophy "verified scientifically." Yes, here are the grounds on which our scientists seek to convict Moses and Jesus as liars in whom is no truth.

Can it be possible that Christianity has no better foundation than those just mentioned? Do assumptions like these lie at the base of the Christian evidences? I venture to admit at once and fully, that if the historical proofs of Christianity are not so logical as to necessitate the inference of its truth; if the proofs, the most imposing ever summoned to vindicate a theme, are inconsequent; if the best and most learned and most honest minds that ever sought truth have been deceived in the conclusion that Christianity is what it claims, then not only must we surrender it as a fraud and grieve over our blasted anticipations of a better life in its light, but we must embrace the most absolute skepticism as to all history, and as to any of the facts and characters which are named in it. And for such a conclusion we are not prepared.

There is no unproved assumption at the basis of the Christian evidences, for their postulate is *God the Creator*, and their climax the matchless Jesus in whom dwelleth all the fullness of the Godhead. I look at Christianity as to its origin, its proofs, its contents, its aims and its fruits, and compare it

with the most satisfactory deductions of the most clearly defined physical sciences, and it is my sincere conviction that it does not suffer in the comparison even with them. On the other hand when I compare it with certain other physical sciences not so clearly defined; when I hear one of them expressing his materialistic philosophy in a wonder whether the "nebulous haze—the formless fog—which philosophers have regarded, and with good reason, as the proximate source of all material things," might not "contain potentially the *sadness* he was then feeling, and whether the very *thought* he then had might not be only a part of the old mountains ground into soil by glaciers and converted into brain; when I hear the philosophers announce some conceivable but unproved material cause of all we see as a substitute for God, the Creator; when I recall the absurdities, and contradictions, and frauds of many so-called sciences,—I say, when I compare Christianity with this class of physical sciences it appears to me to bear the contrast in the most satisfactory manner.

To-day the moral law of the Pentateuch is as evidently and demonstrably divine as the law of gravitation, and Moses could as easily have compounded the one as originated the other. To-day the facts in the life of Jesus, his birth, ministry, miracles, moral perfection, death and resurrection, are as clearly proved as the best authenticated facts of history, or the clearest deductions which science has made in the laboratory and observatory. The divinity of the virtue it enjoins and the humanity it describes as an ideal to be reached, are as clearly above human origin and invention as electro-magnetism, and I would as soon believe that Michael Faraday created the vital nerve that pulsates news over the world, as that Paul or John could have invented and described such a religious scheme as Christianity and held up to human gaze such a character as Jesus Christ.

But when in this comparison we reach out with agonized unrest, not for a mere antecedent, but a **FIRST CAUSE** of what

we here see, and when philosophy names a few facts with the laws which regulate them, and then becomes dumb, whilst Christianity with the most positive confidence declares that "In the beginning God created the heavens and the earth," "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," we see and joy in a First Cause. And when in a world of death we stand shuddering on the brink of the grave, and Jesus says to us "He that believeth in me shall never die," and again "In my Father's house are many mansions, let not your hearts be troubled," then I thank God that we are not left to the comfortless materialism of physical science, the alembic, and the dissecting room, but that we have a Christianity which says "We *know* that if our earthly house of this tabernacle were dissolved we have a building of God, a house not made with hands eternal in the heavens." And as we note these contrasts we will not allow a skeptical philosophy to enslave us! Here again we see that Christianity does not suffer by a comparison with physical science.

In the *third* place let me speak of the *results* of philosophy and Christianity.

Here as in the previous discussions I desire to contrast the claims of the two systems in a spirit of candor and magnanimity. Nor would I contrast the results of the two were they not compared by certain scientists with a conclusion by no means favorable to Christianity. In stating their view I shall not only show the ground of their unfavorable conclusion but the true glories wrought by physical philosophy.

The scientists dwell on the practical nature of their discoveries. The investigations of Franklin were the means of protecting human life and property, furnishing a powerful agent in the investigation of the laws of nature, and the discovery of an agent by which news are easily flashed over the world. The discoveries of Davy furnish safety to hundreds of thousands who work in mines, and thus add value to the

minerals stored beneath the earth's surface. The analysis of the chemist reveal certain hidden properties of air, rock, and soil which are of immense value to the capitalist, the mechanic, the manufacturer and the agriculturist. The keen observer of the laboratory has found out nature's secrets as to the iron ores, coals and limestones, and has instructed the ignorant how to convert these into iron to be applied to an inconceivable number of useful purposes. Whitney converts whole states into cotton fields. Howe pioneers an invention that puts the sewing machine into several millions of houses. Watt, Fulton and Stephenson have furnished an agent which is equal in England alone to the muscular force of 100,000,000 men, and what must be its sum total in all other nations! they have furnished an agent which drives manufactories, ships, and locomotives, producing practical results of amazing value and magnitude. These students of nature have discovered and applied the magnet to the guiding of men on land and sea, and they have utilized the discovered laws of nature in an infinite variety of ways. How long can we breathe without being beneficiaries of physical science! Where can we walk or ride, on land or sea, without experiencing some blessing, force, or safety conferred by the physical philosopher! Who can calculate the money value and power imparted to society by Watt, Stephenson, Franklin, Faraday, Morse, Goodyear, Bessamer, Howe, and a multitude of other scientists? Well may we pause and reverently own the debt which the world owes to science, a debt too great to be cancelled by the revenues of empires or the measureless incomes of business.

Let the scientist state this obligation as strong as he may, so long as he simply states what results physical science has produced; nay, let him go outside of mere money values and social revolutions which have sprung from this origin to magnify the genius of the philosophers, and the undying glories of what they have done,—and I will most heartily subscribe my name to it all. But when either these true

philosophers or any of their skeptical disciples transcend the just bounds of eulogy and institute what is designed to be a damaging comparison between the *fruits* of philosophy and Christianity, then I must be allowed to protest and plead the reasons.

And here I am embarrassed by the riches which furnish my reply, which shall be as condensed and as candid as I can make it.

And at the very outset, what does history teach as to the relation of philosophy and Christianity? I speak of physical philosophy. Which is the cause and which the effect? Did science analyze the facts of nature and discover Christianity? Has physical philosophy been the quickener of the human mind, the inspiring and regenerating force of races? Has it flourished in the land of Mohammed and Buddha, of the Malay and American Savage? Has it as an original force sprung up in heathen nations, giving them an impulse toward every right morality, and a power in every social force? Has it produced the virtues which belong to the best manhood, the most elevated society, and the greatest mental fruitfulness?

Let us examine history and we shall find that Christianity is itself the cause of this boasting philosophy. Christianity has quickened mind, planted schools, endowed universities, and sent the pulsations of mental life through the peoples and races. There is not now, and there never was, such a quickener of mind as Christianity. It has fired the so-called Christian nations with such a thirst for knowledge as has impelled men of genius to explore all the hiding places of nature for God's truth. These very scientists have been educated in schools founded and sustained by Christianity, and under its inspiration have made their discoveries. And then with strange ingratitude they speak of philosophy as the cause, which is as wise as to speak of a golden pippin as the cause of the tree which bore it.

I might stop here by justly claiming for Christianity as their *cause* all sound physical philosophy and its discoveries,

but for the sake of all that is noblest in man and in the universe, let me add another consideration. Philosophy itself will not deny that "the world and the things in it" are only valuable as they have relation to man himself. What value have the deposits of gold, iron and coal, the boasted forces of electro-magnetism, heat, light and air, and all the marvelous forces of nature discovered by philosophy, except as they are related to man? All these things are instruments and over them all you may write truthfully "man only is great." But what is it that *mainly* makes man great? Is it his wonderful physical nature? By no means. Is it mainly his *mind*? Is Hamilton's dictum true, "In man MIND only is great." With loud protest we deny the proposition. What then is the *chief* thing in man that makes him so worthy a being that the very world itself is for his sake? It is not that he can perceive, for perception is only an instrument. It is not that he can remember, discriminate, classify, reason, nor even that he is so grand a creature that he cannot exist and yet not know self-evident truths, for all these are still instrumental to a higher end. And what is that? Man as a being that can feel the obligation to be truthful, good, benevolent, and holy, man as a moral being who owns he ought to be pure as God, is the end for which the world and its secret faces, and its philosophies are here. Strike out this and what is left? Let man be as keen an observer as ever stood on a watch tower, as rapid a learner as ever thirsted for knowledge, as mighty a reasoner as ever welded arguments into chains, having the gift of prophecy, and understanding all mysteries and all knowledge, yet let him be a lying profligate, selfish, impious, unloving bad man; nay, suppose every human being on the earth to be like him; what would all the world, and the grand instrumental forces of both it and of man's intellect be good for?

The great thing, then, to be done, is not to discover and utilize the ores, coals and gases, the electricity, the formulæ of chemical elements, the books, and powers of mind.

By no means. *The great thing is to make man as a moral being, a virtuous, a good and happy being.*

If, then, there be a God who loves the good and detests the evil, if there be an immortality in which the pure shall exist forever, and the evil also, if there be a heaven for the pure and a hell for the evil—then I assert that he who saves a soul has done a grander act than he who discovers the law of gravitation; that he who picks the meanest human waif out of the mire of sin, has done a diviner work than he who discovers the most important laws of nature; that he who writes such a tract as “The Dairywan’s Daughter,” with its consequences, to William Wilberforce and Thomas Chalmers, to an enslaved race, and to an enslaved national Church—has done a more glorious work for the world than he who discovered and forced steam to become the slave of man. Aye, when the heavens shall be rolled together like a scroll, and the world shall be burned up, in the light of another and higher existence, the man that has gone to some dark corner of the globe and turned a single soul to Christ, shall shine as the stars in the firmament, and what he did shall be more glorious and enduring than the work, even, of him who gave the magnetic telegraph to the world. The men who have wrought in the laboratory and observatory among these secret things of nature—the men to whom we erect statues and whom we garnish with regal gewgaws, shall not in the full blaze of the final judgment be so honored as the humblest man who has clothed the naked, fed the hungry, visited the sick, and saved the lost. In that day, the profoundest scientists shall not be named; but to the pure, the good, the loving, Christ, shall say: “Come ye blessed of my Father!”

If we review the history of nations and races, we find that Christianity has become the dominant force among men; it has enlightened and elevated nations; it has wrought miracles among Teuton, Celtic, and American savages; where it has come, the school, the university, the hospital, and the asylum have sprung up. The physical results of science are



as nothing to the intellectual and moral results of Christianity. To-day, the very creation is groaning and travailing together in pain, except so far as Christianity has brought deliverance, and as for "the good day" so universally looked for when our earth shall be inhabited by only the good, philosophy is as impotent to bring it as it is to open the portals of light which the sun has closed behind it at night. In Christianity alone, with its divine moral law, its true estimate of man in his ruin, its God-Christ an infinite Saviour of the guilty, its virtues worthy of God, taught and exemplified by Christ, its Divine Spirit and its doctrine of Charity, the true Fatherhood of God and the true brotherhood of man, I say in Christianity, we find the central force that has wrought the moral triumphs that make the world what it now is,—the force that shall make the world what its God declares it shall be.

I speak in all sincerity in declaring that no man should be deceived or enslaved by a skeptical philosophy as if especially physical science had been more patient, and honest, and successful in its researches than Christianity; or, as if physical science were faultless in its assumptions of unproved assertions whilst Christianity is most guilty in its assumptions and unreasonable conclusions; or, as if, finally, physical science, with all its triumphant results, can present such triumphs as Christianity can—moral triumphs on a stupendous scale that is ever enlarging to include the entire race of man. Philosophy may say: "I have discovered the laws of Nature and augmented the values of property, and done many wonderful works for man!" But Christianity points to ten thousand times ten thousand and thousands of thousands of lost sinners she has found, and to a world she has saved, and say: "In my Lord's strength I have done all this,—a work that shall grow more illustrious as the ages roll away!"

No; my friends, we will not be spoiled by philosophy, but we will cling to Christianity, and cry out in tones of thunder: "NONE BUT CHRIST!"

YOUNG GENTLEMEN OF THE SENIOR CLASS :

There is no need that I detain you much longer in closing a discourse prepared for you. You to day stand where I have seen eleven classes stand before. Some of those who have heard me on occasions similar to this shall hear me no more. Death has introduced them to another life.

I mention not this to excite your alarm but to quicken your zeal in doing what you have to do. That you will all have a *long* life who would venture to predict ? It is possible that your work if done at all is to be done soon. I speak to you as wise men.

If death be a fact whose precise location in our individual lives is concealed, we may well ask ourselves what have we to do ? Some lives are glorious although they be short. Among those who have stood here, Alexander L. Wilson died young with strange composure in the divine beauty of a completed life. Alfred Breed Post, our elegant scholar, our eloquent preacher, having fought a fight bravely for life that he might preach the everlasting gospel, at last in the very midst of triumph, yielded his chastened spirit to Christ leaving a life in the rounded beauty of completeness. Jacob Moon had also fought his fight with poverty like a man. How often have his hands bravely swung the bell of this very Church, and performed the humble drudgery for this place of worship ! how many precious dollars did he earn at our woodpiles and in our gardens, that he might gain an education ! Grand ambition ! grand triumph ! when he, the patient and brave toiler, stood on this platform to receive with his own honest right hand the written symbol of his triumph ! And he too died in the very midst of success. He had toiled, and succeeded, and then he died, but he left a completed manhood, a beautiful life on whose closing hours heaven shed its selectest glories.

Yes, these all have died and yet they had rounded their lives up into the fulness of a manhood worthy of heaven.

Those who stood with them here may live long but not reach as true and grand a result as they did so early.

The shadows of life thus mingle with its lights to add tenderness to this scene. I will not now dwell on those secular aspects of your future in which you are so deeply interested, but rather in this sacred place, and before this deeply interested multitude seek for words bearing on your higher interests. The unpretending discourse of to-day furnishes what we need. "Beware lest any man lead you captive through philosophy."

There is a God, and for a time you are dwelling in this His world. His law is the measure of your virtue. It requires not a Bible to assure you that your moral nature is disordered. You are sinners. You are mortal. Your wounded moral nature predicts penalty. You are alarmed. What shall you do? Shall you ask Farraday for some demonstration of electro-magnetism, or Tyndall of light, or Agassiz of glacial theories, in order to heal your moral wounds, and disarm your fears as sinners against law? Shall you ask Huxley or Darwin for some infidel theory of life? Shall you explore the laboratories and observatories of the men of science for relief from hurts of the soul?

Gentlemen, I love science, but no scientist can without damage to me and to you, take the place of him who wrote the 20th of Exodus, or of Him who spake as never man spake. You need this Bible and you need this Jesus. I pray you beware of any mere philosophy which knows no God but the laws of nature, and which refines man's soul itself into a delicate but actual materialism. You shall meet men who applaud the old philosophies of Zeno and Epicurus and ask you to substitute them for the sermon on the Mount, and the words of Christ, and this is what I say, young men, hold on to the Bible, hold fast to Christianity, and with all your power adoring Christ, the God-man, the Saviour, cry out "my Lord and my God." Let not any so-called science or philosophy enslave you, capturing you from Christ. He

is the highest human example, and in the imitation of Him you shall find the fullness of success and joy.

With this single admonition as the sum of our teaching we send you forth to your work. In all your successes we shall sympathise with you, and especially shall we be happy if we hear that you cling to this dear old volume, and believe in this precious Christ, and die in the full assurance of hope that converts death itself into the herald of life, and the grave into the ante-chamber of heaven. Young men, farewell, and may God bless you! Yes, God bless you!

“ How sweetly fall those simple words  
 Upon the human heart,  
 When friends long bound by strongest ties  
 Are doomed by fate to part;  
 You sadly press the hand of those  
 Who thus in love caress you,  
 And soul responsive beats to soul,  
 In breathing out, “ God bless you ! ”

And again, young men, in the name of a true friendship begotten in these associations now coming to an end, farewell, and God bless you!

[From the *College Courier*, (New Haven, Conn.) June 14, 1873.]

WABASH COLLEGE, (Crawfordsville, Ind.)—The annual catalogue of this institution is on our table, and shows that substantial progress has been made during the year. Its Faculty is made up of eight regular Professors and three Tutors. In the Collegiate Department there are 85, distributed as follows: 22 Seniors, 12 Juniors, 24 Sophomores, and 30 Freshmen. In the Preparatory Department there are 82, of whom 29 are in the class that enters Freshmen the next year. In the English and Mercantile Department are 98. In all the Departments there are 268, a decided advance on any previous year.

Wabash College is one of the best specimens of western institutions, which have done a great work for the higher culture at the West. It has a singularly interesting history, as we gather it from its published documents.

After a careful examination of the subject a few men resolved to found the college. This was in November, 1832. In December, 1833, the institution was opened with 12 students. The appeals for help at the West were as fully answered as could be expected, and it was finally resolved to send an agent to the East. It was a season of financial embarrassment, and after repeated vain attempts to secure aid in Philadelphia, New York, and Boston, the agent Prof. Hovey, after conferring with the Faculty at Andover, appealed to the country Churches, and raised several thousand dollars.

Its financial growth has been very marked, so that it is out of debt, and has permanent endowments for current expenses and charities to a large amount. Its buildings, campus, and other properties are valuable. It has a cabinet of rare value, and generous friends are preparing to enlarge its library. The same is true of its philosophical apparatus. In all its endowments, appliances, and location, Wabash College occupies a noble position.

Unlike our Eastern colleges, it is forced to prepare its own Freshmen. There are few classical academies at the West, and the public schools do little in the preparation of students for college. In this respect this college is a fair sample of what most western colleges have to do. The policy of Wabash is to turn no young man away for tuition, nor because he does not propose to pursue a classical course. Many go there expecting to study the common English branches, who determine to take the full course.

The college has had several very marked interpositions. The last year brought from a single friend \$50,000 in cash, which placed the institution in a state of pecuniary independence quite in contrast with its own beginnings and struggles. We hear that other friends are devising generous things for this growing college, which among its many merits has this, that it rigidly maintains its standard of scholarship and generously aids worthy young who need it.

The Campus includes 33 acres of magnificent forest, the main college building—a very fine one—the Dormitory just repaired at an expense of several thousand dollars, the Academy, and the beautiful and well furnished Gymnasium. It has a military department, the government furnishing a professor and 200 cadet rifles. It is a very charming place for young men seeking an education, and is doing not a little to detain students in the West, who would otherwise go to Eastern institutions.