

ARTICLE III.

THE PHILOSOPHY OF CHARLES WOODRUFF
SHIELDS.¹

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I.

A THIRD volume of "Philosophia Ultima," by the late Dr. Shields, of Princeton University, concludes, without completing, an undertaking of exceptional magnitude in the philosophical literature of this country. It is true that this work does not seem to be widely known even to those teachers in philosophy and theology whose professional interests it most concerns. Perhaps this can be explained without any large subtraction from its claims to serious attention. The new, posthumous volume has intrinsic merits of its own, but is the least finished portion of the whole. It is a reissue, with rearrangement of chapters, and some fresh material, of the author's Paddock Lectures, which were given out first in 1900. It is edited with a very attractive memoir of Dr. Shields by Professor William M. Sloane, of Columbia University, who also prepared the biography of Dr. McCosh. The memoir is a valuable addition to the academic annals of this country,

¹ *Philosophia Ultima*. By Charles Woodruff Shields. 8vo. Pp. 96. Philadelphia: J. B. Lippincott. 1861.

Final Philosophy. 8vo. New York: Charles Scribner. 1877; 2d edition, 1879. The same revised as *Philosophia Ultima*; or, *Science of the Sciences*. Vol. I. 3d edition. 8vo. Pp. 419. 1888; Vol. II. 8vo. Pp. 482. 1889; Vol. III. With a *Biographical Sketch* by William Milligan Sloane. 8vo. Pp. xxxvi, 227. New York: Charles Scribner's Sons. 1905.

and shows all too briefly the engaging personality and extraordinary learning of its subject, who died at Newport, R. I., in his eightieth year, in August, 1904.

The biographer tells us that with this new volume the work "is for the first time before the public in its entirety." Unhappily this is evidently a mistake. The title-page, the author's own Preface, and the entire plan of the previous discussion, require at least three, and probably more, chapters to complete the book. The missing part should traverse the three sciences of psychology, sociology, and theology, after the treatment given to astronomy, geology, and anthropology; and then should at least be followed by one chapter, summing up. Moreover, the new chapter on Theism stops in the middle, and shows the marks of a first draft. After dealing with the three classes of *a priori* proofs, it should take up the three proofs *a posteriori* mentioned on page 50 of Volume III., and page 420 of Volume II.; and this should also be followed by a summing-up. But, besides all this, the entire treatise lacks the final revision and large improvements which the author designed, and for which he long collected material. Some of this material was ready for use whenever a new edition of the earlier volumes should be made; particularly a much-needed revision of the introductory chapter in Volume I. This chapter, as it stands, was never suitable to its present use, but only to its original purpose, as an inaugural address to college students. It conveys a somewhat wrong impression of the actual character and plan of the succeeding work, which, in all its theoretical first division is primarily philosophical, and only incidentally apologetic in its aim. In all, we have but half of the original project in our hands; but it is safe to say that this is far the more important half. The original plan involved three principal divisions, of

which the first is finished, the second incomplete, and the third is unbegin. In the first division, which covers all but seventy-two pages of the first two volumes, we have all of the strictly theoretical part, and enough of its application in the second division to exemplify the way in which the theory and its practical corollaries should be used. But the fundamental premises of the third volume are the reasoned conclusions of the whole foregoing discussion; and neither the merits nor the faults of the new volume can be adequately gauged, save in connection with what has gone before.

When the earlier volumes first appeared, unusual interest and expectation were aroused among all such reviewers as give evidence of having read them with due care. By others they were passed over lightly, because the scope, the aim, and varied excellence of the massive book could not be comprehended in a glance. By other persons still, the argument was entirely prejudged, the title of the treatise ridiculed, because misunderstood, and the attempt to coördinate theology with other sciences was scorned; either because no pains were taken to see how this was done, or because, in the reviewer's mind, theology stood for nothing but an obsolete superstition. Of the work as a whole no thorough and comprehensive estimate has been published hitherto, nor can any such be offered here. Only such an outline of the treatise and its history will be given at this time as shall direct attention to its claims, and make more intelligible the position of the latest printed volume.

The whole work, whatever its defects, may be viewed as the most ambitious single task of scholarship that any one man in this country has produced; as the first large scheme of cosmic philosophy on inductive grounds originating in America, and as a sustained effort of exalted thought seldom paralleled in any land. Moreover, its literary and moral qualities are of

the highest kind. The author is master of a splendid style,—clear, strong, effective, beautiful, yet chaste, often rising to stately eloquence. No treatise in philosophy can be named surpassing this in charm and power of expression. In the completed first division of the work there is also a rhythmical balance and proportion in the arrangement of material that show the constructive genius in literature at its best. The moral qualities present are more rare and precious still. No such ambitious plan was ever pursued with a greater self-effacement of the author, with less self-assertion, or less parade of a great and obvious erudition. No such survey of all human thought was ever made with more of magnanimity and justice in the exposition of contending views, with more self-restraint in treating doctrines repugnant to the author's own, with more of charity, or wider sympathy, or better poise of mind, with so little misrepresentation of other men. The few errors of this sort that occur mar but little the general discourse, and never spring from an unfair spirit.

All this would be granted by every careful reader of the entire work, whatever opinion of its leading argument might be formed. But this is enough to entitle the three volumes to the best consideration of all scholars. These qualities are not so cheap and common in the world of books that they may lightly be ignored.

Dr. Shields was a graduate of Princeton College and Seminary, who, after a fifteen-years' distinguished pastorate in Philadelphia, was called, in 1865, to occupy a new chair in the College, devoted to instruction in the "Harmony of Science and Revealed Religion." In those days it was surely and commonly believed, not only by most theologians, but by most scientific men, and the greater number of British and Ameri-

can scholars, that, however men might differ in their interpretation of nature, history, and the Bible, yet between the data of theology and the data of other sciences no antagonism could be shown. The so-called conflict between science and religion was not in the field of verified fact, but only in that of provisional interpretation. Make the interpretation right, and the agreement of Christian theology with the sciences would then be plain. A serious obstruction existed only in the fact that many theologians were then as ready to insist on the finality of some dogmatic construction of scriptural data, as many scientific men to-day on the finality of some speculative construction in the data of natural and historical science. Between the men of science and the men of theology in this regard there is no difference; for they all alike have sinned, and come short of the full glory of the truth.

In 1861 Dr. Shields had published an essay, of some ninety-six octavo pages, entitled "Philosophia Ultima," projecting a scheme of research in which general or cosmic philosophy was regarded as a terminal science, or science of sciences, the first function of which should be to integrate the sciences, with the inclusion of theology, in order to throw their blended light upon the cardinal problems of cosmology, knowledge, being, and divine revelation. If Christian theology was itself a science, founded in experience and valid testimony, its findings should be coördinated with those of every other science; for "truth, from whatever source it emanates, must yet be found consistent with all other truth" (i. 310). It was the business of philosophy to coördinate the sciences, in order to answer properly the questions belonging largely to them all,—of the origin, course, and destiny of the heavens, earth, and man; the problems of knowledge, being, and divine revelation; of the First and Final Cause. In this exceedingly brilliant

pamphlet Dr. Shields not only projected his own work, but addressed the first clear call to American scholars to apply themselves to productive philosophy in the largest sense, and by the most scientific method; a method, primarily inductive, which should combine all valid means of knowledge in all fields of actual research. The call fell upon ears already filled with the noise of civil war, yet the interest it evoked led on to the founding of his chair.

Jonathan Edwards had projected a cosmic philosophy for which he wrote out marvelous notes on natural science and the mind. But he doubtless intended to conform the entire system to the fundamental theory of being, with which, like Herbert Spencer, and like Hegel, he set out; a theory reached by him through a single line of brief, imperfect argument. Mr. Emerson treated every subject from a cosmic point of view; but he had no system, and did not submit to the imperative requirements of induction. The Calvinistic transcendentalist Dr. Hickok was the first American scholar to elaborate something like a cosmic system; and his seven volumes are a neglected mine of profound suggestion, still valuable as such. But, excepting in his "Empirical Psychology,"¹ and for ends of illustration and suggestion, Dr. Hickok openly scorned the inductive method, while more largely indebted to it than he

¹ First published in 1854, revised with the aid of President Julius Seeley in 1881, and still used in schools and colleges as an introductory text-book, notwithstanding all the new psychology. The revised edition concludes with nearly sixty pages in which Dr. Hickok summarizes the doctrine of all his books, which, taken together, make the most important contribution of any American author before Dr. Shields to systematic, general philosophy. The "Outlines of Cosmic Philosophy," by John Fiske, appeared in 1874, but only as an interpretation of Herbert Spencer, with improvements. The enormous influence of Spencer in this country was largely brought about by his American expositor Fiske and his American editor Youmans.

seemed to be aware. The first American who has both projected and constructed an original cosmic system upon inductive grounds is Dr. Shields. His pamphlet of 1861 was received with admiration, mingled with some incredulity, as being at least the language of a magnificent dream, if nothing more. But the first instalment of his later treatise had appeared yet earlier, as a paper on Comte, in the *Princeton Review* of 1858. The germ and key of Dr. Shields' whole enterprise lies in that first paper upon Comte, the revised form of which makes the chapter in his Volume I. entitled "The Philosophy of Nescience."

Without any of the usual theological invective against the infidelity of Comte, here was given a calm and penetrating study of his "law of the intellectual evolution of humanity." Taking the positivist on his own ground, and with strictly positivistic reasoning, Dr. Shields in a masterly manner showed how, "if positivism could be made its own judge, it would pronounce its own sentence"; how it "proceeds upon the abuse of a sound method," gathering up enough truth into itself to refute its own remaining error (i. 290).

The organization of empirical science attempted in the name of philosophy by Comte was recognized by Dr. Shields as a great service to philosophy, however imperfect its rationale might be, as given, and however encumbered with mistaken views of the nature and actual tendency of science. The organization of empirical science in a serial system, based upon the natural order of facts, means no less than the integration of human experience into a coherent and intelligible form; and, while not the only nor highest function of philosophy, it may well be viewed as its preliminary function, indispensable to that adequate interpretation of the world as a whole, in terms of cause, which makes its higher aim. Philosophy, as

often said, is no mere compendium of the sciences, yet in human experience lies all its occasion and its ground. To find the meaning of experience is its business. This is possible in the degree that the representative facts of experience are seen as a classified total. The meaning of experience is its reason. The reason of anything must be ultimately found in some rational cause and purpose. If no such cause or purpose is implied in human experience and the world, then these are without a reason, without significance, without an explanation. But before any matter large or small can be explained we must get together all the facts concerned, in their proper order and relation. At least, we must so seize upon those facts which best will represent all others. Philosophy in its largest sense was always man's effort to explain the world, which makes our largest group of facts. Infinitely varied as human experience is, yet it can all be reduced to a few large groups of fact. The sciences classify the facts. Philosophy integrates their classification and principal results to determine their causal implications. Unless the sciences culminate in philosophy, and unless philosophy can show the causal implications of experience, the world is only described and not explained. A consistent positivism does nothing but describe, and will not believe explanation possible; although it is very common for men of science to suppose that their mere description of phenomena and laws constitutes an explanation. We begin to explain when we assign a cause; but laws are only the mode of action of a cause, while proximate causes are rather the conditions of action of a primary cause, and are themselves causes only in a secondary sense. The first American scholar clearly to recognize and formulate this relation of philosophy to the sciences was Dr. Shields.

But, again, so long as any group of facts goes unrepresented

in philosophy, philosophy is incomplete. Theology, in its largest sense, may be viewed as the science of religious facts, than which there are no facts of more importance to the entire human race. It was Edmund Burke who first called man the religious animal, as Schopenhauer called him the metaphysical animal; and man is certainly and universally both. Even in Comte the ineradicable religious nature cried for expression; and, being denied its proper object, found an object, as men always do, when so denied, in the creature instead of the Creator. But religion universally concerns man's relation to the supersensible world, and recognizes factors on the cosmic plane of a causal, rational, and moral kind. Christian theology collects and interprets facts in the highest region of human experience, an experience attested by good witnesses at the outset, by the cumulative evidence of several thousand years, and by the corroboration involved in a vast range of Christian experience since that recorded in the Christian canon closed. This, at least, has been the claim of this theology until the last few years, a claim shared by every division of the Christian church.

As all experience has its causal, and hence its metaphysical, implications, so these may be legitimately inferred if the facts are duly presented. Religious experience in the Christian life, and particularly that recorded in the Christian canon, throws upon these implications a great light. Thus light has come into the world, but very often men love the darkness better.

The philosophical task carried on by Dr. Shields for more than forty years was that of resetting the problem that confronted Comte.¹ Accepting with Comte a synthesis of science

¹A fact which seems to have been detected by only one of all his reviewers, and he a German, writing in "Die Zeitschrift für Philosophie," after the publication of the second volume.

as the proper foundation of philosophy, not as the whole of it, Dr. Shields reorganized the sciences with a better rationale than Comte, or Spencer, or Whewell, or any one before him had proposed; better also than that of Wundt, whose "System" appeared with the second volume of Shields in 1889. But it was also the aim of Dr. Shields to show that precisely those two factors of knowledge which Comte excluded from philosophy, the metaphysical and theological, were both alike indispensable to its completion, and to a large extent coincident with each other. All experience is found to involve an epistemology and an ontology which philosophy must educe. Theology in its large comparative range, as the science of religious experience or religious facts, was placed by Dr. Shields at the head of the empirical series. The whole range of human experience is found to be represented by six leading sciences, viewed as heads and deputies for all the rest; namely, Astronomy, Geology, Anthropology, Psychology, Sociology, and Theology. But theology, besides the *rôle* which it maintains at the head of the empirical sciences, also has another office to fulfill in connection with philosophy, as will farther on appear.

Christian theology, in its systematic form, has always, in the past, assumed that the great canon of Christianity is a doctrinal unit. From first to last, it offers a coherent body of teaching which theology must gather out and formulate. This ever enlarging and progressive, yet coherent, teaching may be found to underlie all the variety of literary and popular statement through which it is conveyed, to persist through all the changes of the centuries in which the writings were composed, and also to persist unhurt despite the acknowledged imperfections of the scriptural text now in our hands. While no more free from paradox than the world or human nature is, yet to

all profounder students of the Bible in the past its unity of thought has seemed more pervasive, organic, and pronounced than that of the world itself when seen apart from its biblical explanation. This doctrinal unity of the Bible is itself, for those who find it, a fact unparalleled in literature, that can be accounted for only by the theory which the writers of the Bible frequently assert regarding the source of their own teaching. The honesty and intelligence of these writers, and the exceptional experience which they claim, are attested by so vast a range of impressive evidence that any such theory in which they all concur is entitled to be taken seriously; and, even for the ends of science and philosophy, it may justly be employed as at least a working theory, subject to further confirmation or discredit by the process of an honorable application.

The claims which are found in the Bible to a supernatural instruction, which the writers first received and then conveyed, appear to cover all branches of their teaching, including not only those portions of a purely ethical and religious sort, and those in which the character, commands, and promises of God are given, but also a modicum of doctrine in the domains of cosmology, anthropology, psychology, and the active relations of God to the physical world. Moreover, the doctrinal unity of the Bible marks all these portions of its teaching. Whatever of this sort is presented in one passage substantially agrees with what appears in every passage. Every subsequent writer assumes, and often supplements, what is said before; and no real disagreement, nor essential incoherence, can be proved in what may be called the physical teachings of the Bible. The New Testament writers assume in this department everything taught by the earlier writers, and add to it with entire consistency. The physical teaching of the Bible,

whether erroneous or correct, is at least a self-consistent teaching from beginning to end. That the same is true of the psychological, ethical, and the purely theological teaching of both Testaments, when properly understood, has always been obvious enough to many, although frequently denied. In the lower plane of physical teaching the self-consistency is more obvious still, and more difficult to dispute. This doctrinal unity of Scripture greatly facilitates comparison with all the sciences that traverse the same ground; and Dr. Shields undertakes to show how such a comparison may be made to serve the ends of science.

Judged by its own showing, the Bible records the exceptional experience of many persons in the relations of God to this world, and also, at least on many occasions, gives us the explicit testimony of God in many things of which we otherwise must be ignorant. On the showing of the Gospels, Christ claimed repeatedly, not omniscience, but finality for all of his own teaching, on the express ground that he gave forth only the words that God had given him. He put men on their peril for rejecting his words, and indorsed for many of the prophets their earlier claim to announce the very word of God himself.

Actual experience and valid testimony are all that science asks for its foundation; but the thought that God himself has given categorical instruction to mankind is a thought that has become excessively repugnant to the men of this generation. Not only will they not believe that this ever, in a single instance, has been done, but often they would not have it done if they might. They even insist that God could not if he would so speak to men, and that he would not if he could; that if he did men could not understand, and are better off without any such approach. It is only matter for derision if to-day a man

believes the diametrically counter-statement made of this by the Hebrew prophets and apostles and the Christ. Categorical instruction from his Maker is the last thing that man seems to want; and many would sooner go ignorant forever than submit to any teaching of this kind.

But, on the antiquated Christian theory, God is not only Maker and Upholder of the world, and his will the dynamic energy by which its evolution is sustained; he is a moral Being with an infinite solicitude for man. He makes all the first advances, would gladly show his sympathy and help, and make himself known in a gracious and perfectly intelligible way. He has always from the beginning condescended to our low estate, with infinite patience borne with our neglect, and sought to teach us plainly the most important things about himself, and his relation to this world.

Besides revealing his own character to all who choose to heed, and everything that should bind us to himself in bonds of confidence and love and immeasurable delight, he has also exhibited his severity towards the persistent apathy, hostility, and infidelity of men, that we might realize the enormity of our voluntary estrangement from his love. He has also given a few simple lessons, regarding the origin, course, and destiny of the heavens, the earth, and man. The lessons are precisely such as all conditions of humanity most need to learn about these things; and they are given in the form most admirably suited to the universal mind of man. The book in which they are now contained is the only one in possession of the world to-day of absolutely universal fitness to the instruction of the human race. The lowest savage and the highest sage have found it an inexhaustible delight, and the most satisfying source of wisdom in the world. No academy of science, no

prince of scholars, no human genius, could devise a book to take its place in the heart and education of mankind. It exemplifies and enforces the highest ideal of the most modern and scientific pedagogics. If God did not produce this book, yet it is worthy of his production; and no man can conceive how God himself could have made a better book than this had he so wished, to meet the deepest, the first, and the most universal needs of both man's moral and his intellectual nature.

Half a century ago Herbert Spencer pointed out that "there runs throughout education at large the pestilent practice of starting with the abstract and ending with the concrete, a practice utterly at variance with the course of mental development, which starts with the concrete and ends with the abstract." Behold! a Daniel come to judgment. Although the pestilent practice so condemned precisely marks the books that Mr. Spencer wrote for pupils of a higher grade, no such mistake was made in the universal primer that the Heavenly Father caused to be prepared. "Its teachings are given in the common language of appearances," says Dr. Shields (iii. 161), but are not therefore any the less true; while this language of appearances has shown reality to man with a power absolutely unapproached. There is good reason to believe that whatever inspiration or authority attaches to the morals and religion of the Bible, attaches neither more nor less to all its teachings; and that "the Bible was simply designed to teach whatever on due examination it is found to teach, and to produce all the good effects which it is seen experimentally producing. It no more presents its theological material in a scientific form, than its psychological or ethical material. Although theology is its chief topic, yet it has immensely promoted all other interests of civilization; and it can be shown that it has a philosophical

value in the realm of science, besides its higher value in the sphere of religion" (ii. 456).

On its own showing the only reason why God has not given us far more favor and instruction than he has, is that we have so largely rejected his counsels, and despised all his reproofs. But the Bible, so far from being suited or designed to discountenance research, or to make a substitute for science, has actually furnished the most important clues, and largest stimulus to human learning, of any book the world has ever known. Its exceeding value in this regard has received the grateful acknowledgment of countless men of science, and the scholars in every Christian century to this last. Yet had the Bible suffered less neglect, science to-day would be far more advanced than it actually is. Like foolish children with tasks beyond their sole, unaided strength, but too wise in their own eyes to receive the aid a father is able and willing to bestow, so all too commonly have men turned their backs upon the highest source of wisdom in their reach. The loving child loves to be spoken to in just the way God in the Bible is said to speak to men; but a disobedient, self-conceited son cannot abide the instruction of a father.

In natural and historical science the data are the same for all, but the induction and interpretation of facts have varied with the history of science; and often at the same period the theories of different men have been in violent conflict with each other. Indeed, they are so at this very time. And so the data of the Bible are the same for all, and the more important data are now accessible to nearly all in western lands; while a similar conflict of interpretation has occurred. But the great fundamental claim that an historical revelation has been made which, while transcending common experience, has yet entered the actual experience of men—this claim never began to be

widely discredited until an hundred and fifty years ago; nor in English-speaking lands until a very recent period.

On the theistic theory, the whole world is a revelation from God for those who have eyes to see; and every science is engaged in interpreting the data of a revelation. Such was the world even to Thomas Paine, and to John Fiske, and preëminently to Emerson. Such was the world to all the Hebrew prophets and to Paul, to Plato and Cicero, and many more. On the Christian theory, a more explicit and articulate revelation has been given than that implied in common experience. It is a revelation that culminates in Christ, though it began with the beginning of mankind, whereby, to meet the urgent necessities of men, the all-merciful God has been pleased to make known himself, and many things, in a more perfect and impressive way than that of his ordinary works. If such a revelation be supposed, no misunderstanding of it would invalidate its own reality and truth. Moreover, though it be granted that, in some sense, this revelation may be repeated in the subjective experience of men to-day, yet it would still exist for us as an objective revelation first, as an objective criterion and means of truth.

On the supposition that the theistic and Christian theories both are right, both methods of revelation provide us with a valid means of knowledge. Philosophy, of course, cannot disdain to employ any valid means of knowledge; while to coördinate the teaching from each source is a manifest privilege and duty. Again, the evidence in favor of both theories is at least quite strong enough to warrant the scientific use of both as working theories in any scheme whatever of research. It is on this ground that both theism and the Christian revelation are employed by Dr. Shields throughout his work, while they accumulate so much more evidence by the whole process

of his argument as to stand justified in his conclusions at the end. These premises are not dogmatically used by him, but problematically used, until they prove their right to be accepted in a purely philosophic theory of the world (ii. 279-283). Once accepted, they form the basis of an Organon of research, the specific rules of which, having been inductively acquired, may thenceforth be deductively applied to all the minor questions that arise between theology and the sciences. This, however, anticipates the closing portion of the exposition here in progress.

But now it is said, that the sciences teach one thing, and the Bible quite another. No agreement is possible, and one side or the other must give way. It was in part to meet this exigency of modern thought, this violent rupture between theology and the sciences, that the "Philosophia Ultima" was written; and a great Irenicon it has well been called. Before theology and the sciences can be properly united in one coöperative scheme of knowledge, the cause of offense must be removed. Either a strict demonstration must be given of their actual agreement in detail, which is manifestly impossible; or it must be shown that the disagreement all belongs to a temporary misunderstanding. An exceedingly strong presumption must be shown for the belief that, when the facts of nature, human history, and the Bible are adequately considered, justly viewed, and freed from every false construction, they will be found to agree, and mutually support each other. A valid presumption of this kind would entirely warrant the attempt to include theology as a proper science with all the sciences in a vital organization for reciprocal service. A presumption to this effect was always maintained by the wiser men of science and of faith; at least it was so until past the middle of the nineteenth

century. Many partial defenses to strengthen it have appeared both from the side of science, and the side of Christian faith.

But never until the issue in 1877 of the first volume of "Philosophia Ultima" had this presumption been confirmed by an exhaustive study of all the historical relations between theology and the sciences. The results of such research in the first half of this first volume constitute a history of human thought which in the excellences that it combines has never been surpassed—in its lucidity, accuracy, acumen, learning, wisdom of classification, power of generalization, elevation of spirit, equity, candor, magnanimity, vivid portrayal, and perfection of speech. The author's capacity for condensing a book into a paragraph and a library into a chapter, has produced a marvel of intellectual workmanship; to understand the significance of which we must read in the memoir the testimony of his friend, Professor Caspar René Gregory, of Leipzig. The history is such as could only have been written by a man profoundly and sympathetically acquainted with the aims, method, results, and history of the sciences, on one hand, and of theology on the other.

The logical issue of this history, strangely overlooked by some, is not only to make reasonable the presumption of congruity between the real facts of nature, history, and the Bible teaching, when once these are rightly understood, but to make forever unreasonable the contradictory conclusion. Yet for three editions only of this critical, historical and moral masterpiece, which have not yet been wholly sold, many editions, and several translations, have appeared of two other books in this same field, by writers who, with all their great abilities, cannot speak of theology without travesty; who make the infirmities of theologians the condemnation of their science, without applying this rule to other men; and who allow no

standing at all, as a science, to that great body and soul of learning which, for near two thousand years, have done more than any other to furnish education and incentive for every other learned pursuit.

Having thus provided a great historical vindication of the old presumption of congruity, Dr. Shields proceeds to show the function of philosophy as an umpire or judge between the sciences; a function that Lord Bacon signalized, and of which Pringle-Pattison and Dr. Ladd have spoken well. Coming in logical order after the sciences of experience, and based upon them, philosophy is bound to listen impartially to the testimony rendered by each one, ruling no science out of court which has had a reputable history, and forming no verdict on the questions in dispute that is not based on such a hearing. Of course the enemies of any science will suppress its testimony if they can. But philosophy holds a high court of cassation, and is inflexibly bound to consider every one. The testimony of the Hebrew witnesses, recorded for us in the Bible, of the prophets, the apostles, and of Jesus Christ himself, has been treated by men of science and philosophy, and even men of theology, of our day, precisely as the testimony of the Hebrew soldier recently in the military courts of France. Such an Umpirage of Philosophy is exemplified through this entire work in a way to teach a lesson to all scholars; yet some reviewers of the treatise, both Christian and agnostic, could see nothing in this umpirage but the attempt of a particular philosopher to settle all things by his private judgment.

Next, the author deals with those "two poles of modern speculation" (i. 315), "the Positive Philosophy, or theory of Nescience, ignoring revelation, and the Absolute Philosophy, or theory of Omniscience, superseding revelation" (i. 283). Just as theology and the sciences require to be joined to com-

plete the data of philosophy, so these repugnant extremes of modern thought, represented in the names of Comte and Hegel, must be fused in a catholic scheme of knowledge which, recognizing the merits and avoiding the faults of both, shall vindicate the metaphysics of experience. Such a catholic philosophy, however, must be based on all experience, including that on which theology is built; for to exclude from all consideration the highest range of human experience, is to mock philosophy, and turn her back to hopeless wandering from the very mount of her best hope.

The Final Philosophy is a terminal science which must reckon impartially with all other sciences before it can adequately deal with those highest problems in which theoretical philosophy culminates. Dr. Shields' first volume ends with an outline of this Final Philosophy, which the author had projected first some sixteen years before; and to which this volume only serves as a critical and historical introduction.

[TO BE CONCLUDED.]