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SAWING AND SPLITTING.

BY HUDOR GENONE.

IF 2 men working one day of 8 hours can saw and split 32 cords of firewood, how many cords can 3 men working one day of 10 hours saw and split?

The Illogical Seminary of Inquirendo Island had gone on for a very long time adhering to what they termed the faith of their fathers. The professors taught dogmatically, and the students received weekly the engrafted word of the Arithmetic, reverencing Mathematics as the only true god.

But in the course of time Providence, or Provident Nature, or the Divine Harmony of things raised up, or lowered down (as one may think) a certain Dr. Hyer Kritik to teach what the orthodox called erroneous and strange doctrine. Dr. Kritik was learned, poetic, eloquent, masterful, plausible, and captivating in his manner; and in his newer light drew after him much more than the third part of all the students.

It would be quite beyond the limits of an article such as this to go into minute details concerning all the new doctrines or new interpretations of old ones. I shall therefore confine myself to a consideration of one single text above quoted, taken from the Rule of Three.

There had been a time in the history of the church when there was a great conflict as to this portion of Scripture; many having been found to say that it was quite enough for them to live under the rule of one. In the end, however, after a deal of controversy and much bloodshed, the book was admitted to be canonical; since which time the faithful have never doubted that it contained a true revelation of the Almighty Mathematics.

As to the exact character of this "revelation" illogicians were much divided, even among those who professed and called themselves orthodox. Some held that this text justified the believer in undertaking to saw and split 16 cords of wood in one day of 8 hours, provided only he had the faith. These pointed out the manifest fact that *if* 2 men could saw and split 32 cords in 8 hours, 1 man could do at least half as much.

Another school of thought, perceiving that no man of ordinary muscle could by any possibility do so much claimed that the inspired word must not be taken literally. Here again opinions divided; some claiming that the "day" referred to was longer in ancient times; while others insisted that for this especial purpose and occasion only, the day had been miraculously lengthened. Another branch of the church took strenuous ground that the word "split" in the authorised version was an interpolation, and that the parties really had to *saw* the wood only, without splitting it. Here again discord crept in, for while a portion held that under mathematical guidance and with due faith, the wood could be *sawed*, others, no less learned and prominent in church circles, denied it, asserting that, even if angels split the wood, the task of sawing alone was beyond human power.

An irreverent outsider suggested that the wood ought to be piled as well as sawed and split, and that while Mathematics was about it he might as well have made a clean job of the matter.

It is perhaps needless to say that this party did not claim to be orthodox.

At this very hour the great heresy trial is going on; Dr. Kritik having been called before the assembled church has re-enunciated his famous thesis—that instead of 32 cords the rendering should be 3 or 2, which he claims would amply suffice to bring revelation and reason into full harmony.

In the mean time there are those (including myself) who hold to the opinion that in this and cognate matters there exists absolutely no room for opinion; that mathematical truth exists in the quoted text as in a multitude of others in the sacred arithmetic, altogether independent of the form of statement.

We hold that the truth of the relations of numbers would be the same no matter what values were employed—whether of men, or days, or hours, or cords, or whether they sawed and split, aye and even piled. We hold, in short, that errancy in fact may exist, and in the text does exist, quite compatible with inerrancy of truth; that there is a truth higher than single facts, and that no text and no book is or can be of more value than the principles it contains.

Alas! how few agree with us. The great heresy trial, as I say, is now on, and both sides (the illiberals and the illiberally liberal) sawing and splitting words of whose use and value both sides are woefully ignorant.

SCIENCE.

We propose the following five definitions of science: (1) Knowledge, i. e., a description of facts. (2) Truth, i. e., a correct description of facts. (3) The search for truth. (4) The methodical search for truth. (5) The methods of searching for the truth.

The Latin *scientia*, from which the word "science" is derived, bears a similar etymological relation to *scire* (i. e., "to know") as the German *Wissenschaft* to *wissen* and the English noun *knowledge* to its verb *to know*.* It means, originally, the stock of knowledge we have, and knowledge is "a description of facts."

Knowledge, it must be understood, has to be a correct description of facts; it must be true. The facts must be well ascertained and unmistakably stated. Knowledge means, *eo ipso*, correct knowledge; and correct knowledge is called "truth."

Science, however, as the term is commonly used, is not only the stock of knowledge on hand, but also and especially our endeavor to acquire knowledge: it is "the search for truth."

Science, as the search for truth, presupposes our desire for truth and includes the way to reach it. The methods of science demand: (1) The exact observation of phenomena; (2) the tracing out of their determinative factors; (3) a discriminate statement of the phenomena under observation in comprehensive formulas, called natural laws; (4) a systematising of natural laws; (5) if possible, tests by experiments; and (6) the application of the results of science to practical life.

The amount of matter and energy remaining constant in the whole system of the entire universe, science, in order to trace the determining factors, has to deal with changes of form, which in their succession are called causes and effects.

Science, above all, widens the range of experience by the discovery of new facts; it further purifies our knowledge by the elimination of contradictions and errors; it also systematises the description of facts, so as to survey them with the greatest economy possible; moreover, it aims at completeness, so as to exhaust the subject and comprehend in its formulas all possible cases; finally, it makes its statements serviceable to practical ends.

It is the methods of searching which make the

* The ending "ledge" is a distorted form of M. E. *leche* or *lac*, which appears also in *wedlock*. Its root, like that of *lay*, a song, denotes sporting or playing. It is connected with Germ. *Leich*, a song of irregular construction, the root of which is found in Goth. *laikan*, to dance, and Anglo-S. *læcan*, to frolic

search for truth truly scientific, and when we wish to emphasise this, we define science as "the methodical search for truth."

The methods of science have come to be called "science" themselves, because of their importance in the search for truth, as forming the essential characteristic of that which is to be regarded as scientific. In this sense we say: Science is "the methods of searching for the truth;" and these methods consist (according to Mach) in an "economy of thought."

The purpose of science is and remains truth, i. e., correct knowledge or an accurate and exhaustive statement of facts. And the purpose of truth is its application to practical life in the various fields of industry, of art, and of moral conduct.

* * *

The basis of science is experience. Experience being the effect of events upon sentient beings, is a psychical act, and thus it is obvious that all science has a psychical basis. This, however, does not imply the conclusion that all sciences are mere branches of psychology.

Every single science investigates one special province of facts, and the limits of this province are artificially established by abstraction. Chemistry investigates the chemical qualities of things, physics the physical, psychology the psychical, botany collects and systematises all knowledge concerning plant life, zoölogy concerning animal life, etc. But there are no things in the world which consist of chemical qualities only. The chemist confines his attention only to the chemical qualities of his objects of investigation, and leaves out of sight their psychical or any other properties. The domains of the different sciences overlap one another and their barriers are erected simply for the sake of order and arrangement. We have to build up our knowledge piecemeal by limiting our attention now to this and now to that fact, and the limitation of each special science is a wholesale act of abstraction.

Thus psychology, although psychic facts are the basis of all experience, is quite a special province of its own. Psychology is the science which deals with the functions of the soul, i. e., it investigates the province of meaning-freighted feelings. The domain, for instance, of the physicist is limited to the physical qualities of things; so he excludes all the rest and accordingly also neglects the fact, that all our physical knowledge is possible only because we are sentient beings. He takes the whole state of things which make physics as a science possible for granted, and leaves their investigation to other men, or, if he desires to do it himself, defers it to another occasion. If this were not so, a general confusion would prevail and we might consider any science as a part of any other science. We might regard astronomy as a branch of

logic, because the astronomer has to think in words (mathematical symbols being here included under the term "word") or, *vice versa*, logic as a branch of astronomy, because the logician exists only as an inhabitant of one of the celestial bodies.

Thus every science possesses a domain of its own, the limits of which are drawn by abstraction.

* * *

The world being thus divided among the sciences, must not philosophy, like the poet in Schiller's poem, "*Die Theilung der Erde*," leave the throne of Zeus empty-handed? There is seemingly nothing left; indeed, according to the Comtean idea of positivism, philosophy is nothing but a hierarchy of the sciences. Comte, in order to elaborate a positive philosophy, thought it necessary to present in a very voluminous work abstracts of the various sciences. This was a mistake, for, first, abstracts of the various sciences are better made by specialists, and, secondly, philosophy has other duties than that of dabbling in the spheres of the different sciences.

What, then, is the domain of philosophy?

Although all the different sciences have taken away their parts, there are left some very important objects for investigation: (1) The relations among the sciences, which make of them a systematic whole, so that their unity is conceived as a consistent world-conception; (2) the basis of all the sciences and the scientific method, including the tools of scientific inquiry, which are such ideas as cause and effect, natural law, knowledge and cognition, experience, reason, truth, the criterion of truth, etc.; and (3) the practical application of the sciences as a world-conception to our own existence, with the view of gaining an insight into the nature of being and the duties which it imposes.

An investigation of these subjects is of great importance and constitutes an abstract domain of its own. Yet as all the sciences are inseparable from each other, so philosophy is inseparable from the sciences. Its field is not outside them, but within them. A philosopher must also be a scientist; he must be imbued with the spirit of exact scientific inquiry, as, *vice versa*, the scientist must be a philosopher; he must understand the relation of his specialty not only to the other specialties, but also to the whole system of their common philosophical world-conception. EDITOR.

THE ETHICS OF GREECE.*

A SURVEY.

BY W. L. SHELDON.

PHILOSOPHY begins with the query *what*? Ethics begins with *why*? The Greek people were really the first, in the true and deep sense of the word, to make use of these two interrogatives. There

* Address before the Ethical Society of St. Louis, April, 1892.

had been *opinions* before; but they had been only sentiments or traditions, suggestions or analogies from nature; they had not come from the direct application of the mind to human life, to nature, or to God.

The Egyptian people, for example, had had an architecture and a religion; but they had founded them largely on certain vague and striking analogies which they drew from the natural conditions of that country. The river Nile with its remarkable peculiarities, actually gave them the basis for their interpretation of nature, and the elements of their religion. The Hebrew people, on the other hand, in their splendid theocracy had a basis of truth, great and impressive, but also not philosophical, not scientifically ethical, because it simply tended to answer all questions with the one reply,—the *will of God*. But the people of Greece went beyond analogies in nature, beyond even inferences from the will of the Deity. They gave reasons and developed principles. They sought by their own minds to find a definite, positive answer to the *why* and the *what*. As the first rationalists, they were the first philosophers.

We cannot help feeling a certain sense of awe at the majesty of the work of that particular race, or we might more especially say, of that one city of Athens. We do not forget that that one place in the short interval of about two centuries, established a greater influence on the world than any other city or race or country in any thousand years.

The Hebrews gave us theology and the Bible; the Romans gave us laws and political and social institutions; but the Greeks gave us ideas; with them was born the intellectual life, from them came science and philosophy. What shall we say when we remember that that one city in that short time has taken the permanent lead in five if not six of the greatest spheres of human work: literature, sculpture, architecture, ethics, and philosophy—I was almost going to add, statesmanship. We do not forget that never has there been a single instance of a building which for beauty of architecture could even be regarded as the parallel of the Parthenon. Only two poets, Shakespeare and Goethe, could be accepted at any time as the equal of three of their great dramatists, Æschylus, Sophocles, and Euripides. Even Michael Angelo stands second in sculpture to Phidias. There has not been one solitary mind, in the last twenty-three hundred years, equal in depth to three of the great minds of that people,—Socrates, Plato, and Aristotle. I give these facts not as personal opinions, but as the accepted standpoint of the average scholar and student of the present day.

It is a settled fact that probably three quarters of the best and deepest thought we meet in literature and philosophy, can be traced to those writers of Greece. Again and again it has come over me how extensively we could refer the opinions of Spinoza, Hume, Kant, John Stuart Mill, Descartes, St. Augustine, Marcus Aurelius, even Thomas à Kempis to those first three writers and thinkers: Socrates, Plato, and Aristotle. We might even say the same in the branch of statesmanship. Many of the most profound thoughts in politics and economics can be traced to those minds of Athens. What shall we say of an individual who could be a great general in war and at the same time have the versatility to write the "*Memoirs of Socrates*," and a volume on "*Social Economics*," as was true of Xenophon? Where too is the parallel, unless it be in the case of the Medicis, of a statesman matchless in his own science and at the same time so appreciative of all the great arts? For my own part I remember nothing in the addresses of statesmen, superior, if indeed equal, to the one celebrated funeral address of Pericles. Much of the deepest thought on questions of state are to be found in this short but magnificent oration. The utterances would be almost as suggestive for us now, as they were at that time. We quote some of those sentences that were reported as coming from that great statesman:

"Our form of government does not enter into rivalry with the institutions of others. We do not copy our neighbors, but are an example to them. It is

true that we are called a democracy, for the administration is in the hands of the many and not of the few. But while the law secures equal justice to all alike in their private disputes, the claim of excellence is also recognised; and when a citizen is in any way distinguished, he is preferred to the public service, not as a matter of privilege, but as the reward of merit. Neither is poverty a bar, but a man may benefit his country whatever be the obscurity of his condition. There is no exclusiveness in our public life, and in our private intercourse we are not suspicious of one another, nor angry with our neighbor; if he does what he likes we do not put on sour looks at him, which, though harmless, are not pleasant. While we are thus unconstrained in our private intercourse, a spirit of reverence pervades our public acts; we are prevented from doing wrong by respect for authority and for the laws, having a special regard for those which are ordained for the protection of the injured, as well as those unwritten laws which bring upon the transgressor of them, the reprobation of the general sentiment."

"We are lovers of the beautiful, yet simple in our tastes, and we cultivate the mind without loss of manliness. Wealth we employ not for talk and ostentation, but when there is a real use for it. To avow poverty with us is no disgrace: the true disgrace is in doing nothing to avoid it. An Athenian citizen does not neglect the state because he takes care of his own household; and even those of us who are engaged in business have a very fair idea of politics. We alone regard a man who takes no interest in public affairs, not as harmless, but as a useless character; and if few of us are originators, we are all sound judges of a policy. The great impediment to action is, in our opinion, not discussion, but the want of that knowledge which is gained by discussion preparatory to action. For we have a peculiar power of thinking before we act, and of acting, too; whereas other men are courageous from ignorance, but hesitate upon reflection."

"We alone do good to our neighbors not upon a calculation of interest, but in the confidence of freedom and in a frank and fearless spirit."

"I would have you day by day fix your eyes upon the greatness of Athens, until you become filled with the love of her; and when you are impressed by the spectacle of her glory, reflect that this empire has been acquired by men who knew their duty and had the courage to do it, who in the hour of conflict had the fear of dishonor always present to them, and who, if ever they failed in an enterprise, would not allow their virtues to be lost to their country, but freely gave their lives to her as the fairest offering they could present at her feast."

"The whole earth is the sepulcher of famous men; not only are they commemorated by columns and inscriptions in their own country, but in foreign lands there dwells also an unwritten memorial of them, graven not on stone but in the hearts of men."

We may be told that this was said to please the populace of Athens. No, it was a great deal more than that. The people knew perfectly well that what he had said of them was only partially true. He had shown the wonderful tact of a statesman in suggesting to them what that people might actually become, by apparently telling them what they were. He saw the germs, the possibilities of that ideal among those people and in their institutions. He sketched there for all future time the elements of an ideal democracy which should have respect for law, treat all men equally, and yet pay recognition to superior excellence. Individuality and fraternity were combined. Loyalty to the social organism is suggested. As I read that speech over and over, it ceases for me to be an address on political science, it is no longer a mere funeral oration; it is a master-piece in the science of ethics. It suggests what a state *ought to be*. It holds aloft a magnificent ideal. It suggests a universal Athens. Amid certain elements that were imperfect and crude, but in keeping with his own time, there is probably as much if not more of the universally true and ideal for the science of politics to be found there, than in any other address of any other statesman of human history.

It may be said, however, that the greatness of their sculpture and their architecture has nothing to do with the science of ethics. What does the Parthenon have to tell us about evil and good, wrong and right? What shall we gather there about the idea of justice? I recognise a certain propriety in the question, if it were with reference to the arts of other nations. But the Parthenon does preach one everlasting sermon. Ask ourselves for a moment what is the one supreme contrast between that building and the edifices of our modern world. It lies in the fact that there was not a single block of stone in the entire structure that did not do something or serve some purpose in the building. If there was a column, it bore a weight. If there was an ornament, it filled in a natural

vacancy; indeed we might almost have said, that to have taken out a single stone would have pulled down the whole edifice; whereas in modern times, we might often take out a large part of a building and leave the structure standing. The main thought in their architecture was, that if beauty was to be there, it was not to be *put on*, but just to grow as it were from the normal proportions of the temple. It was a magnificent discovery which brought out the truth, first, that simplicity could be beautiful; and secondly, that beauty itself was something that must come from within and be an essential part of the structure. The Parthenon is simple almost to the point of being tame. We take it all in with a single glance. One look, and we see the building. But the effect of it on the mind is everlasting. Beauty has to be an essential part of the thing it adorns, else it is no lasting beauty at all. That was the great lesson in ethics that came from the Parthenon.

Precisely in the same way we can draw a like truth or discovery from their sculpture. It had been so much the effort of the Assyrians and Egyptians and other people to express greatness by means of the colossal. A king or an emperor was indicated by the huge size of his figure in comparison with those around him. Statues were usually made vastly greater in size than the person they represented. The Greek, on the other hand, was able to portray greatness by having it indicate itself in the mere form or position of the figure or in the lines of the face. We could see a Greek statue of ordinary life size, and be able to say, this was the statue of a king. It was an extraordinary discovery in the science of ethics, that greatness did not consist in size or dimensions, but in quality of form and texture of character,—that it was an essential part of a person, coming as it were by itself, without being sought after or put on. Such was the greatness of Pericles. We look at the figure and look at the face as it has come down to us carved in marble, scarcely more than life size, contrasting it with the colossal heads of the kings of the Orient, Assyria, or Egypt, and it appears of itself to say, "I am a king."

It may be asked in the same way, how is it possible that the poetry or drama should teach ethics? They belong to the sphere of art; surely it should not be expected that they should preach sermons. It is commonly admitted that art loses its power when it begins to moralise. Poetry should be poetry, and nothing else; it should appeal to the sentiments, to the higher feelings, but surely it should not express thoughts and principles!

This may all be very true. Nevertheless it is perfectly possible that under certain conditions we might be able to discover the elements of ethics in the drama. It is not uncommon that an individual soul in a great emotional crisis, when giving utterance to his feelings, should in a sudden outburst let those emotions crystallise in some one great universal thought or principle. This would not be moralising. It would be only a spasmodic illumination of the feelings, as the intellect in one wide grasp appreciates the true meaning or significance of the crisis. Great trial, sudden calamity, will now and then have the effect of making the individual suddenly look deep into philosophy. We not only feel deeply, but we *think* intensely, in such emergencies. It is in this way, I assume, we are to explain the occasional profound thoughts that are expressed in the characters of the dramas of Shakespeare and Goethe. Likewise it was with the equally great, if not greater, poets of Athens.

Probably the deepest and most profound utterance in the whole sphere of ethics was an outburst from Antigone in the play of Sophocles. We are all familiar with her magnificent appeal to the "unwritten law which knows no change." It is now a commonplace in literature:

"It was not Zeus who gave them forth,
Nor Justice dwelling with the Gods below,
Who traced these laws for all the sons of men;
Nor did I deem thy edicts strong enough,
That thou, a mortal man, should'st over-pass
The unwritten laws of God that know no change.

They are not of to-day nor yesterday,
 But live forever, nor can man assign
 When first they sprang to being. Not through fear
 Of any man's resolve was I prepared
 Before the Gods to hear the penalty
 Of sinning against these."

When that speech was uttered ethics as a science was born. Until that truth had been discovered, there could have been no such science. But when the heroine defies the law of the state, and says that there is a higher right, an ideal law with which the edicts of the state should square themselves, that that higher law should prevail over the authority of the state, yes, over even the King of Heaven,—at that moment human intellect pierced the veil of authority which had rested on custom and tradition. It brought morality within the sphere of knowledge. That proclamation of an unwritten, universal law, was the foundation of the science of ethics. Was Antigone a philosopher? Not in the least. It was the heroic nature rising above present conditions, conscious that her position was right, and, in the emergency, seeking to explain itself in thought. It is in that way that the greatest moral truths have been discovered. We call them prophetic utterances, as though they had come by inspiration; and it is true, in a way they *are* an inspiration, which the mind gives to the deeper instincts or feelings by venturing to put its interpretation upon them. It is not a question whether the particular defiance of Antigone was right or wrong; but the truth she discovered in the crisis of her emotions was as valuable to the world as the discovery by Newton of the law of gravitation. Justice and right were there laid down as resting on deeper foundations than the state, custom, tradition, or even the will of God.

We could offer a still more pleasing illustration of the form in which the science of ethics may be said to have its origin in the drama of the Greeks. It may be found not only in philosophical utterances, but in types of character. There could also be no true science of ethics until it had been discovered that there was an actual, positive obligation on the part of the individual to human society. It was essential that men should understand that the human soul had to live for something else, than itself and its God. It was necessary that truth should be expressed both in thought and example. We recall, for instance, the play of Iphigenia by Euripides. There too is a heroine. In this case, however, there is no appeal to the unwritten law, but to a sense of human obligation.

We remember the story. It was a question whether the daughter of the king should be sacrificed on the altar to propitiate the Deity. We do not question now whether it was the true method of understanding religion. It is simply the issue whether if the welfare of the people demanded it, an individual ought to make the sacrifice. I know of nothing in literature finer than the speech of Iphigenia:

"Mother do you hear my words, for I perceive that thou art vainly wroth with thy husband. But it is not easy for us to struggle with things impossible. It is meet, therefore, to praise our friend for his willingness, but it behooves thee also to see that you do not be an object of reproach to the army, and we profit nothing more, and he meet with calamity. But hear me, mother, thinking upon what has entered my mind. I have determined to die and this I would fain do gloriously, I mean, by dismissing all ignoble thoughts. Come hither, mother, consider with me how well I speak. Greece, the greatest of states, is now all looking at me, and there rests in me both the passage of ships and the destruction of Troy, and, for the women hereafter, if the barbarians do them aught of harm, to allow them no longer to carry them off from prosperous Greece, having avenged the destruction of Helen whom Paris bore away. All these things I, dying, shall redeem, and my renown for that I have freed Greece will be blessed. Thou hast brought me forth for the common good of Greece, not for thyself only. But shall ten thousand men armed with bucklers and ten thousand oars in hand, their country being injured, dare do some deed against the foes, and perish on behalf of Greece, while my life, being but one, shall hinder all these things? Have we a word to answer? And let me come to this point: it is not meet that this man should come to strife with all the Greeks for the sake of a woman, nor lose his life. But if Diana should wish to receive my body, shall I, being mortal, become an opponent to the Goddess? But it cannot be! I give my body for Greece. Sacrifice it and sack Troy. For this for a long time will be my memorial, and this my children,

my wedding, and my glory. It is meet that Greeks should rule over barbarians O mother, but not barbarians over Greeks; for the ones are slavish, but the others are free."

It might be said that this was superstition, that they ought to have had a different idea of their God. But that is not the question for consideration. What Iphigenia was thinking of, was, not her debt to the Deity, but what she owed to her people. It was the consciousness that the welfare of all Greece was of more importance than her personal life. It was all expressed in that one magnificent utterance, "Thou hast brought me forth, not for thyself alone, but for the common good of Greece." This tells the whole story.

We have there the second truth essential to the birth of the science of ethics. It was the distinct recognition that society had a direct claim on the individual, that we make sacrifices for the good of our fellow-men, not only because we care to do it, or because we must do it, but also because the law of right and justice exacts it from us. The more crude, half-developed nature would have taken the contrary standpoint. It would have stood up in defiance. Iphigenia's appeal was not merely to sentiment, but to a clear and final principle. That is what makes so striking and remarkable this play of Euripides.

It is interesting, in passing, to observe also that the two characters in that literature uttering these profound intellectual truths were women. We may only half appreciate the significance of that unusual circumstance.

I have ventured in this way to give illustrations of the influence of the thought of that people in the sphere of ethics; from their sculpture and architecture in the Parthenon; from the utterances of statesmen like Pericles; and from the sublime and immortal words of Sophocles and Euripides. But the Greek people, as we have said, were not only the fathers of sculpture, architecture, the drama, and statesmanship; we look to them also for the origin of philosophy. It might be said that all the gropings of the mind and heart in the poets, architects, and statesmen, finally culminated in the greatest of all minds,—Socrates, Plato, and Aristotle.

The more I have read the thoughts of those minds, the more it has come home to me how little was left to be said. We ordinarily begin by studying the writings of later thinkers of the modern world. It is a startling discovery when we find that much of the best thought of Kant and Emerson, Hume and Pascal is to be read in the writings of those other earlier minds, who lived fifteen hundred or two thousand years before them. I do not say that all our religion or philosophy comes from the Greeks. We owe an equal debt in another direction to the Hebrews and the Romans. But ethics as a science certainly had its origin with the people of Athens.

It would be impossible in a few paragraphs to give even an epitome or outline of the thoughts of those three philosophers. We cannot say which was the greater or the greatest; but we can only rest assured that they were, and have always been, the fountain-head of philosophy. It began with Socrates, with his everlasting habit of putting questions, not being willing to let things stay as they were just because the fore-fathers had thought them right and wise. He was the one who perhaps for the first time in history did put that question,—why, and wherefore?

It is so ordinary now that we do not appreciate its purport. But there was a time when men first began to hear the query, what are you doing that *for*? why do you act in that way? They had literally never thought of it. They acted from moment to moment, from hour to hour. It was a revolution in human feeling when a man stood forth and said, you must first in your mind grasp the whole purpose of life before you begin to act or work at all; otherwise, what you do is liable to be futile, aimless, and without any result. Socrates insisting on discovering the whole purpose of life, was the philosophical beginning of the science of ethics. It all grew out of that commonplace notion,—if you make a window, do it not

with reference to one single room, but adjust and fashion it according to the proportions of the whole house. Out of the plain science of carpentering came ethics; as indeed we might say, from a plain humble carpenter came the religion of Christianity.

Then came the idealist Plato. He had received the method, he had been given his first principles or suggestions from his great teacher. The principle of adjustment or proportion of each act to the whole life, of every detail to the one supreme purpose,—this was his starting point, as given him by Socrates.

Plato has truly been called "the Father of Idealism." A certain class of minds will always look to him as their leader. It is not the particular theory which he held; his special doctrine may have been somewhat modified. It was the amount of *stress* which he laid on ideas and their influence, which gives him this distinction. We are all somewhat realists and somewhat idealists. Whether we belong to one or the other class will depend simply on the degree of importance we give to the concrete or ideal.

It was of consequence that so early in history a colossal genius should appear which should exalt *pure mind* to so lofty a height. The great Master who had taken the hemlock was no more. He had begun the science; now came the further consideration.

Where was that law of virtue to be found? How should we seek for it? The genius of Socrates had shown itself in the one persistent demand that we should at least set out to find it. Plato's mighty contribution came in the assertion that that law was to be found as a supreme idea *back in the mind or soul itself*. It was an equally grand discovery for the philosopher at that time to have asserted that the soul "could perceive certain things by its own power." It fixed irrevocably the right of pure mind to a certain authority. No agency since that time has been able to draw it from its pinnacle. With Socrates began the science of ethics; but we could still further say, with Plato, in the higher sense, began philosophy, because with him began the analysis of mind and its true power and sphere of influence. He may have exaggerated the degree of its importance. But the assertion has not yet been refuted, that in this soul of ours there is something not quite to be accounted for by what we perceive outside of us. We do from within ourselves contribute something to knowledge.

The law of virtue had been stated as a positive fact to be defined, accounted for, and explained by the first great teacher. The second leader came and sought to give that definition. He it was who put forward the idea of the good, as something to be looked for within the human soul. He did not say that it was something that could necessarily be realised and worked out in complete form; he did not assert that we could ever see it with the human eye; but there was the positive assurance that it was there as an idea or an ideal. We read what he says with regard to the majesty of one of those principles.

"Justice is the reality of which this is the semblance, dealing, however, not with the outward man but with the inward, which is the true self and our supreme concern. The nature of justice and the perfectly just man is only an ideal. We are to look at them in order that we may judge of our own joy or misery according to the standard which they give and the degree to which we resemble them."

There, in a sentence, is the position or standpoint of Plato. The artist is justified in giving a perfectly ideal type, though it could be shown that no such a concrete form had ever existed. The ethical teacher is authorised in the same way to draw from his mind an ideal of the perfect man, although it has no existence in reality.

Plato was trying to do in the sphere of ethics just what Phidias was endeavoring to perform with that magnificent structure on the Acropolis. It is for this reason that I like to think of that father of idealism, out there with his pupils in the groves of the academy, because from the shade of those trees they could look out towards that great mass of rock, and as they talked together could let their eyes fall upon the Parthenon. That building was an effort, and the

most successful of its kind ever constructed, to construct an ideal of beauty out of the mind itself. And it was this supremely, because we are to remember that no models were then in existence, no philosophy or science of architecture then prevailed. Those two men accomplished a like achievement in their two great spheres of work. Instinctively we connect the names of Phidias and Plato.

The philosopher could say: "While thou hast not seen it with thine eye; thou canst behold it nevertheless. Though it never stand before thee in external form, it is there in the presence of thine inward vision. It shall follow thee, stay with thee, live with thee, but not die with thee. It shall hold thee in its grasp and never let thee go. Thou canst flee from it but it will be with thee as the cause of thine own shadow. It stands there fixed as a part of thine own soul, *the law of the good*." This in my own words would be the way I would summarise the entire moral philosophy of Plato.

Finally, to close the trio of colossal minds came Aristotle. He is thought to be the philosopher of the concrete and practical. The idealist thinks of him as dry and ordinary; but we are not to forget that human thought at the present day is more extensively made up of opinions and teachings from him, than from either Socrates or Plato. Through his practical genius the thought of Greece was able to become an influential factor in the intellectual development of Europe. The church adopted it as a means of working out their system of doctrine; the creeds of the past owe very much to his teachings. It is doubtful whether they would ever have been in existence if it had not been for the third of those great intellects of Greece. All that he did in the various spheres of economics, political science, metaphysics, psychology, and even natural science, does not concern us here. We are interested only in one line of his influence. He analysed the virtues, he was the first intellect that undertook to write a detailed catalogue of the duties. That was the one thing essential to establish the fact once for all, that ethics could be a science. We may now-a-days think that we have a finer and more thorough classification of the virtues. It is probably true that he has been superseded in this sphere by Immanuel Kant. But the genius comes in the individual who begins the work, sees the necessity for it, suggests the first broad outlines,—not in him who is merely a successor and carries it out to completion. There was one permanent step to be taken. Socrates had laid down as we have said the demand that virtue be defined; Plato had shown where the law was to be discovered; but there remained the task of determining what was its actual nature in the soul, what were the virtues, what made them different from the other facts or laws of the natural world, how were they related to the structure and growth of the mind and the soul. This had not been clearly explained by the first or second of that trio. Aristotle gave the answer. He drew the lasting contrast between outward nature, and the growth of the inward self.

What is the real difference between the way we grow and the way nature acts? Why, he says, you may toss a stone up a thousand or million times into the air, but the number of times you do it will not in the slightest degree encourage the stone to go up into the air by itself. Its law is fixed and irrevocable. You cannot change it, you cannot make it do other than what is its nature. The stone will not fly into the air by its own effort though you were to keep tossing it there for untold millions of years. But on the other hand how is it with one's self? We do actually induce this body and soul of ours to acquire new ways and new habits, by simply making ourselves perform certain acts a number of times. We can literally to a certain extent change and re-make ourselves; we can root out vices by the steady performance of higher deeds; we can make good conduct natural where at one time evil tendencies had that position. In a word virtues are not merely ideas but they are *habits* of the body, and mind and soul. They are not learned, but acquired.

This was the final discovery which practically brought to a

conclusion the history of the ethics of Greece. The entire foundation had been laid. It only rested for the superstructure to be erected by the thought and labors of Rome, France, England, Germany, and lastly America. We are simply building on those foundations. The basis is there and will be the same forever. Aristotle, Socrates, and Plato established the elements of the one great science which most concerns us,—that of ethics. We can see it in the sculpture of the Apollo and Hermes; we view it in the work of the Parthenon; it is to be traced in the Iphigenia, the Antigone, and the Prometheus. We can recognise it in the efforts of Pericles; it culminates finally in those three colossal minds, the philosophers of Greece.

This may almost seem like a superstitious regard for the work of a single people. We do not mean to say that we cannot advance upon them! But the old truths do not change though we make new discoveries. And so it is that the new elements in this science must be a superstructure resting on that first basis of truth which came from Athens. And yet our work in ethics must continue. The best suggestion I can make in conclusion would be from the English poet who sang of Hellas:

"The world's great age begins anew,
The golden years return,
The earth doth like a snake renew
Her winter weeds outworn;
Heaven smiles, and faith and empires gleam,
Like wrecks of a dissolving dream.
A brighter Hellas rears its mountains
From waves serener far;
A new Peneus rolls its fountains
Against the morning star.
Where fairer Tempes bloom, there sleep
Young Cyclads on a sunnier deep.
Another Athens shall arise,
And to remoter time
Bequeath like sunset to the skies
The splendor of its prime;
And leave, if nought so bright may live,
All earth can take or Heaven can give."

What we have to do is told there plainly enough. The Greeks of by-gone days will never come back again. There is no use in attempting to re-establish the position or supremacy of that particular people as they exist to-day. What we have now to do is to build a new, that is, a universal Athens.

CURRENT TOPICS.

The Governor of Pennsylvania, in his annual message to the legislature, speaks of the Homestead riot, and compliments the militia for the "zeal and activity" displayed by those amateur warriors in reducing the working men to "peace and submission." These are portentous words; ominous, not only to the working men but also to their masters. When I remember that the most productive estate of its size in all this world, is the piece of land geographically known as Pennsylvania, it seems to me that if a standing army becomes necessary there to dragoon the working men into "peace and submission," something must be wrong in the management of that farm. "Peace and submission" is an irritating phrase when directed exclusively against the working men, for it implies that the laborers are a conquered class; and a conquered class is a rickety foundation on which to build the prosperity of any nation; because men, and especially American men, will never contentedly stay conquered.

A key to the puzzle is furnished by the Governor himself in that identical message, for he complains of another set of Pennsylvania lawbreakers who live in habitual riot and rebellion without any fear of punishment at all; those numerous incorporated conspiracies, which according to the Governor, appear to be in a chronic state of treason. Asking for an enforcement of the Constitution against all corporations that trample it under foot, the

Governor mentions the Reading railroad combination as "an especially flagrant illustration of the manner in which the Constitution is defied." That is positive enough, and it really seems as if the militia might reduce to "peace and submission" that organized assault upon the Constitution. Unfortunately, the militia is intended for the protection of the Reading "combine" and similar bands of powerful men confederated against the law. Property, abusing its rights, and usurping powers by which the Constitution is "defied" provokes the resistance of labor

* * *

An Illinois statesman has offered in the legislature a bill for lengthening blankets by cutting a strip from the top of them and stitching it on to the bottom; in other words, he proposes to increase the demand for labor at one end of our industrial system, by cutting off the supply of labor at the other. He proposes to limit the hours of labor by law, and he makes industry a crime if persisted in longer than eight hours in any one day. In the language of his bill, "It shall be and is unlawful for any person to agree to be employed, hired, or engaged, or counsel or persuade any other person to agree to be, or to be employed, hired, or engaged contrary to the provisions of this act." The scheme is to increase wages by decreasing the products, out of which all wages must be paid; and to increase the demand for laborers by diminishing the hours of labor. He might as well implore the legislature to flog this old earth to a quicker pace, and thus reduce her hours of daily labor from twenty-four to twenty. The bill is morally unsound because it takes away the right of men to work as long as they please, and to make their own contracts; it is economically unsound because it seeks to increase the demand for labor by cutting off the source from which the demand must come. The plan is fallacious because it makes idleness furnish employment for industry. Abundance, not scarcity, furnishes work and wages. The theory of the bill is born of the mistake that if we diminish the supply of labor by one fifth, we reduce the product of labor in that proportion, and therefore a corresponding increase of laborers must be called into the vineyard to make up the deficiency; but this view of it supposes that there is a reservoir of wages somewhere that is not supplied by labor, a reservoir that can replenish itself whether men work or not. Suppose the length of the working day reduced to four hours, or to two, is it not evident that the result would be less workmen at work, and these at lower wages? The principle of the bill is mischievous because it leads working men to the opinion that it is patriotic and brave to withdraw a part, or all of their producing power from the commonwealth of labor. If that is true, surely we ought to honor the noble army of tramps, and sports, and thieves, who have patriotically withdrawn themselves altogether from the competition with their fellow-men in the labor market. The vagrant, instead of being punished, ought to be rewarded. If we depend for an eight hour working-day on the feeble mandate of an Illinois statute we shall waste the time that might be better employed in seeking the reform in a more effective way.

* * *

Another encroachment upon liberty is reported; this time from Cheyenne, in the State of Wyoming. It appeared in the shape of a judicial denial of the right which the citizens of that commonwealth have enjoyed from time immemorial. The case before the court was that of the cattlemen, indicted for high crimes and misdemeanors. The outrage committed by the judge, a tenderfoot by the name of Scott, was this: He instructed the clerk to enter an order that all prisoners appear in court without fire-arms, and the sheriff was directed to see that the order be strictly enforced. This order deprives a prisoner of that privilege which has heretofore always been allowed him by the unwritten Magna Charta of Wyoming, the right to shoot a witness who may be telling too much truth; or "the counsel on the other side," if

he should happen to become too eloquent in his address to the jury. When I lived out on the western frontier I always thought that a ten-inch revolver, visible in the belt of "the prisoner at the bar," was a wholesome check on the fluent vituperation of the prosecuting attorney; and I mourn over the decay of liberty when I see the blessed privilege of shooting a lawyer in the court-room taken away by the arbitrary mandate of a judge. Mr. Justice Scott carried the innovation beyond the bounds of all reason when he made his order apply not only to the prisoners, but also to the witnesses and spectators, whereby the prospect of enlivening the trial by a free for all fight in the middle of it, was grievously diminished. Of course, a stray bullet might have hit "the honorable court," but that is a timid excuse for taking away from the citizens of Wyoming their ancient rights. With proper contempt for the effeminacy of modern civilisation the Wyoming cowboys read this notice on the court-house door: "Before going into court, gentlemen will please deposit their guns in the ante-room." And when the "guns" were all deposited the ante-room looked like the armory in the Tower of London. M. M. TRUMBULL.

BOOK REVIEWS.

THE AGNOSTIC ANNUAL. Edited by *Chas. A. Watts*. London: W. Stewart & Co.

The *Annual* for 1893 is very good reading, and has little that is typically agnostic in it. Mr. Amos Waters's "Reverent Agnosticism" contains most of that which is at all essentially so. This article is thoughtfully and artistically done; and exhibits Mr. Waters's characteristically "sweet" literary style in its best and latest guise. His prediction of a coming philosophico-religious reconstruction will find an answering echo in the minds of many.

The author in chief, however, of the present number, is Mr. Leslie Stephen, who is known to consider the term "agnostic" as descriptive of his general point of view. By him is contributed the opening paper upon "The Moral Sanction." Mr. Stephen holds that to try to discover "a moral sanction" in the sense of finding out a motive which shall persuade everybody to be virtuous, is to attempt a contradiction. . . . This argument is generally alleged as telling against the scientific moralist, whether of the Utilitarian or Evolutionist variety, I reply that it is equally applicable upon every moral theory. Every genuine 'sanction' must imply a certain character in the persons whose conduct it is to influence."

Dr. Alfred Momerie—who was compelled to vacate a London chair of logic and metaphysic on account of heresy—discourses upon "Dogmatism in Theology." He very neatly distinguishes dogma from creed as follows: "Creed means that which is believed in the present, dogma that which must not be disbelieved in the future." Dr. Momerie declares that what is now called theology does not possess a single characteristic of true science.

Mr. Samuel Laing compares "Sermons on the Mount" of Ancient Egyptian, Zoroastrian, and Christian sacred books. The result of this comparison is by no means in favor of the latest and most familiar homily.

Mr. Edward Clodd, author of some popular summaries of lore relating to religions and evolution, writes on "Anthropology and Orthodoxy,"

Miss C. E. Plumptre, also an author, Dr. Bithell, Mr. Chas. Watts, Mr. F. J. Gould, and Mr. Frederick Millar all send interesting prose contributions.

Poetry is represented by Mr. Gerald Massey's "The Mother Nature," Mr. W. Stewart Ross's "The City of the Dead," and some verses by Mr. G. H. Martin.

The last piece of writing in the *Annual* is especially worthy of note. It is a review, by Mr. Lucian Armstrong, of Captain McTaggart's "Absolute Relativism." This work claims to reconcile idealism and materialism. The author, we are told, "draws a bold and profound line of division between matter and body. Matter," he

affirms, "should stand for the unknown and unknowable substratum underlying both the corporeal phenomena which appeal to human sense, and the phenomena of mental and other forces which are revealed through bodily media."

Body, it appears, is to signify "only" that which can be seen, touched, and so forth. But how if we deny, as Berkeley did, this "unknowable substratum" altogether?

Captain McTaggart holds that "Materialism is the objective explanation to the exclusion of the subjective." While "Idealism is the subjective explanation to the exclusion of the objective." The reviewer, however, does not make clear how his author is able to bring these two points of view to a single focus. Still, every reasonable attempt at the performance of this hitherto unperformed philosophic feat is welcome. And it is to be hoped that Captain McTaggart will not fail to continue the contribution towards a positive system of thought of which the work in question is only volume one. E. T.

THE GOSPEL OF MATTHEW IN GREEK. Edited by Alexander Kerr and Herbert Cushing Tolman, Professors in the University of Wisconsin. Chicago: Charles H. Kerr & Co. 1892. Pp. 116. Price, \$1.00.

It is the aim of the editors of this New Testament series "to emphasise above all else the individuality of the separate writers." They do this by the following methods: 1) by indicating by bold type in the text those words which Matthew alone of the New Testament writers employs; 2) by an estimate of the frequency of occurrence of every word in Matthew; 3) by the designation of the ἀπαξ λεγόμενα in Matthew; 4) by a list of passages peculiar to Matthew; 5) by a summary of the prominent examples of Hebraism in Matthew; 6) by a discussion concerning the original language of Matthew's Gospel with reference to the Hebrew and Septuagint translation in all quotations from the Old Testament; 7) by a vocabulary restricted as far as possible to the use and meaning of each word in Matthew; and 8) by complete Historical and Geographical Indexes, giving reference to all the places of the occurrence of every proper name. Separate sections are devoted to the last seven of these objects. The Greek text is based on Gebhart's eclectic edition of Tischendorf's, Tregell's, and others' recensions (Leipzig, 1891). Little else need be said. The type of the Greek text is very clear, and the text is divided into sections by Latin headings. The book is in every respect neatly got up and printed on good paper. μκρκ.

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