

The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the
Extension of the Religious Parliament Idea

Editor: DR. PAUL CARUS,
Assistant Editor: T. J. McCORMACK.

Associates: { E. C. HEGELER.
MARY CARUS.

VOL. XIII. (NO. 5)	MAY, 1899.	NO. 516
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ÉTIENNE BONNOT DE CONDILLAC.
(1715-1780)

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CONDILLAC.

(1715-1780.)

BY PROF. L. LÉVY-BRUHL.

IN order to characterise Voltaire, Rousseau, and the Encyclopedists, from the point of view of philosophy, the Germans often use a rather significant phrase. They call them philosophers *für die Welt*, popularisers. They consider them quite as desirous of spreading their doctrines among the public as of testing them thoroughly. But was there not one among them, or very near them, with whom the speculative interest stood foremost, a philosopher without any qualification and in the strictest sense of the word, a thinker, in fact, who joined together into a system the body of the philosophical ideas which prevailed in the latter half of the eighteenth century?

This demand was met by Abbé de Condillac. He was, as he has been called, the “philosophers’ philosopher.” Being loved and admired by most of them, he was for some time a contributor to the *Encyclopédie*. He made a long stay in Italy, as tutor to the son of the Duke of Parma, and then returned to France and lived peacefully in the country, apart from literary and philosophical quarrels. He never appeared at the French Academy except on the day when he made his inaugural address. Yet he was personally acquainted with nearly all the distinguished men of the time, and the continual succession of his published works did not permit the public to forget him. These works were numerous and bulky, from the *Essai sur l’Origine des Connaissances Humaines* (1746), in which many of the ideas which he was to develop later on were already sketched, down to the *Langue des Calculs*, which did not appear until after his death. He touched not only upon

every phase of philosophy proper, but also upon pedagogy, grammar, history, political economy and social science, the most original portion of all this considerable body of work being that on the theory of knowledge.

Condillac proposed studying the human mind, not as a metaphysician, but as a psychologist and a logician ; not in order to discover the nature of it, but to understand its operations. He wished to observe the art with which they are combined, and how we are to manage them in order to acquire as much intelligence as we are capable of receiving ; and, therefore, he wished to trace back the origin of our ideas, to discover their birth, to follow them as far as the limits set them by nature, and in this way to "determine the extent and boundaries of our knowledge and to renovate the human understanding altogether."

Condillac's leading idea therefore is derived from Locke, but not from Locke only. Hostile as he was to innate ideas and Cartesian metaphysics, there is in him clearly something of the Cartesian spirit. Locke had inquired chiefly into the contents of the human mind ; Condillac endeavored to construct a system. He sought an "unassailable first principle, sufficient to explain all the rest." He sought it, it is true, in the primitive data of the senses, whereas Descartes had found it in the intuition of thought ; but the opposition between their doctrines does not exclude a certain analogy in their conceptions of the proper method.

Condillac never concealed his indebtedness to Locke, but his estimate of the philosophy of his predecessor varied. In his first work he seems to follow him faithfully and to recognise, as Locke did, two sources to our ideas : sensation and reflexion. Later on, when more thoroughly master of his own thought, he asserted sensation to be the only source of our ideas. He considers Locke to have erred in not carrying the analysis far enough. Locke did not realise how indispensable it is that we should learn how to feel, see, hear, etc. All the faculties of the soul he thought to be innate qualities, and he did not suspect that they might possibly originate in sensation itself. He thought that we naturally make use of our senses by a sort of instinct. Most of the judgments which are mingled with our sensations escaped him. In one word, it was in the very name of empiricism that Condillac criticised Locke's empiricism. It is not sufficient to reduce the whole of our knowledge to sentient knowledge. We must show how this sentient knowledge is produced, resolve it into its elements, and show how these elements can account for every form of activity in the human soul.

Let then our starting-point be sensation, isolated by analysis and separated—or at least Condillac thought it so—from all judgments mingled with it. This sensation does not bring us out of ourselves. It merely consists in a modification of consciousness which may be keen or weak, pleasurable or painful; but it teaches us nothing of what is outside ourselves, or even whether anything exists outside ourselves. This would be true as regards all our sensations, if we had not touch. The sensations of touch have the singular property of suggesting to us the idea of objects distinct from ourselves. They are at the same time feelings and ideas: feelings in their relation to the soul which they modify, ideas in their connexion with some outward thing. Being accustomed to ascribe all the sensations of the sense of touch to external objects, we fall into like habits with our other senses. Thus our sensations become objective; they appear to us no longer as modifications of the state of the *ego*, but as qualities of bodies around us. They have become ideas.

Let us now suppose a sensation more vivid than others to force itself upon our consciousness so powerfully as to throw all others, at least temporarily, into the shade: this exclusive sensation will be what we call attention. But attention may just as well be directed to a past sensation, which recurs again to the mind, as to a present sensation. Memory is therefore nothing but a transformed sensation. We are thus capable of a twofold kind of attention, exercised on the one hand by memory, on the other by the present sensation. Once given a twofold kind of attention, and there results comparison; for, attending to two ideas and comparing them are one and the same thing. Now, we cannot compare them without perceiving some difference or resemblance between them. To perceive such relations is to perform an act of judgment. Thus does sensation, as it undergoes transformations, become successively attention, memory, comparison, and judgment. Having reached this point we have explained the whole of human understanding, which is, in fact, nothing but a collection or combination of the operations of the soul.

By looking upon sensations as representative we have observed that all our ideas and the faculties of our understanding issue from them. Now if we consider them with regard to their pleasurable or painful character, we shall behold the birth of all the operations usually ascribed to the will. Condillac lays it down as a principle that there are no neutral sensations, but that each of them gives us either pleasure or pain, and makes us inclined to

continue it or to escape it. Were it not for this property of our sensations, intellectual activity would not be aroused,—attention and memory, and therefore understanding, would be left undeveloped. But nature has made us very sensible of the relative character of the sensations that affect us. We cannot be uncomfortable, or less comfortable than we have been before, without comparing our present state with the states we have formerly been in; and this comparison makes us feel some uneasiness, or disquiet, and as soon as there is added to this the idea of the object we think likely to contribute to our happiness, the action of our faculties is determined in the direction of this object. This is what we call desire. But from desire spring passions: love, hatred, hope, fear, volition. Again, all these are but transformed sensations.

In order to illustrate his theory, Condillac, in his *Traité des Sensations*, had recourse to the celebrated fiction of an animated statue, shaped internally like ourselves, in which he awakens the senses in succession, beginning with smell and ending with touch. Next we see the faculties of the soul springing one after another from the progressive transformations of sensation. Similar fictions are to be found in Diderot and Buffon, which is sufficient to prove that they suited the taste of their contemporaries and answered their idea of the development of the mind. To-day, on the contrary, we are chiefly struck by the artificial and arbitrary character of such a supposition. We see in it an involuntary confession of the fact that his theory of knowledge proceeds in a purely abstract way.

Yet it would be unfair to condemn their doctrine summarily on that account. It is with Condillac as with many other French philosophers of his time, between whose minds and his there was evident affinity. The solutions he unhesitatingly proposes are hasty and often rash; the problems he sets and the general method he indicates for their solution are highly interesting. In his theory of transformed sensation, Condillac seeks to account for the evolution of the human mind by starting from an irreducible "first fact." As Buffon tried to explain the genesis of our solar system, as Rousseau sought afterwards to explain the genesis of society, Condillac endeavors to trace back the genesis of the faculties of the human mind. On the way he notices many interesting psychological facts. He shows the part played by the association of ideas, which causes us to look upon notions that are really acquired and complex as being natural and simple; he sees that the association of ideas is a particular case of habit. And thus the task of the phi-

losopher, according to Condillac, consists chiefly in dissociating, by means of analysis, the elements which habit has joined together so closely that we can no longer see where they are welded together.

Analysis, therefore, does not stop where reflexion and memory can separate or resolve no further. It is true, we have a tendency to believe that part of our knowledge is born with us. But this is because we can remember a time when we did not know a given thing only in case we can remember having learned it; and, in order to be conscious of learning we must know something already. How then could we remember having learned to see, hear, or touch? And yet it is certain that we have learned these things. Consequently, we are driven to suppose that to be innate the acquisition of which we cannot otherwise account for. All the rest is the product of experience. For instance, if some faculty happens to be perfected (as the judgment of distance by sight), it is therefore acquired; it was in its beginning, at a time beyond the reach of our memory, a first improvement upon some earlier state. Condillac applied to psychology Pascal's well-known saying: "Nature itself is only a first habit, as habit is a second nature."

From these principles naturally follows the theory of instinct. We can distinguish two "selves" in every man: the self of habit and the self of reflexion. "The self of reflexion is its own master, and is conscious of its own operations while performing them. It endeavors to know or reach the objects which it has in view, and which it may give up for other objects when it pleases. The "self of habit" acts in a reflex way, so to speak, without the intervention of consciousness being needed. It touches, it sees, and it directs the animal faculties; it guides and preserves the body. If we suppress in a grown-up man the "self of reflexion," the "self of habit" which remains suffices for such needs as are absolutely necessary for the preservation of the animal. Instinct is nothing but habit *minus* reflexion. But, Condillac adds immediately after, it is by reflecting that beasts acquire it. As they have but few wants, a time soon comes when they have done all that reflexion can teach them. They daily repeat the same actions, and their habits become automatic.

Yet does not instinct often appear to be innate and hereditary?—It does, says Condillac, but it is not so; for we find it subject to improvement; now, whatever is subject to improvement is acquired. All these consequences are most logically inferred from Condillac's own principles. Therefore he had a right to answer

those who reproached him with having drawn his inspiration from the celebrated passage in which Buffon represents man awakening to life and admiring nature around him: "Monsieur de Buffon supposes his imaginary man to possess in the beginning habits which he ought to have had him acquire." To treat as acquired habits faculties which appear to be most inherent in our nature, is Condillac's favorite maxim. We all know how it prospered in the present century. It was one of the ruling principles of psychology, as long as the philosophy of association was in favor, in England as well as in France.

The sum of our reflexions over and above our habits constitutes our reason. But language is necessary for the development of reason. Were our thought limited to the representation of individual and concrete objects and unable to form abstract and general ideas, it would remain forever in a rudimentary state. Now such ideas are simply denominations and designations of classes. For instance, the idea of "animal" connotes characteristics common to man, the lion, the horse, and the totality of animals, and these characteristics only. This idea I can fix only with the help of the word which expresses it. We see therefore how indispensable words are to us. But for them, there would be no abstract ideas. Had we no abstract ideas, we should have neither genera nor species, and had we neither genera nor species, we could not reason upon anything. To speak, to reason, to form general or abstract ideas, are at bottom one and the same thing.

Therefore, to communicate thought is not the only function of language. Whenever man thinks, even though he should not express his thought outwardly, he speaks. This has been called "inward language." The "first advantage" of language, according to Condillac, is to separate thought into its elements by means of a series of signs which successively represent the same. Whenever I reason, all the ideas which constitute this reasoning are present in my mind at once. I should not be able either to enter upon the reasoning or to bring it to a close if the series of judgments of which it is composed were not grasped all together by my mind. It is not, therefore, by speaking that I judge and reason, and these operations of the mind necessarily precede discourse. But discourse is a real analysis which resolves these complex operations and separates their successive stages. It leads the mind from one thought to another, and from one discovery to another. The more limited the faculty of thinking is in one who does not analyse his own thoughts, and who, in consequence, does not ob-

serve all that he does while thinking, the further this faculty must reach in one who does analyse his thoughts and observes even their minutest details.

Consequently, "the art of reasoning is equivalent to the art of speaking." In this sense well-constructed language is akin to well-constructed science. Nearly all our errors originate in defects or misuse of our language. If we treat abstractions as realities, that is, if we mistake for a thing actually existing what is merely the designation of an assemblage of qualities, is not that a misuse of language? How often do we make use of words before we have determined their meaning, and even without having felt the need of determining it! Such confusion in language necessarily implies confusion in thought. Error thus begets error, and language lends itself no less easily to false systems than to true analysis.

There is then but one way of restoring order to the faculty of thinking, and that is to forget all that we have learned, to return to the origin of our ideas, to follow them as they develop, and, as Bacon says, to make over the human understanding. "Go back to nature," is Condillac's motto, as it was also to be that of Rousseau. Error is our own doing. We think and speak erroneously, and therefore we blunder; but we have only ourselves to blame. The spirit of the rising generation is modelled after that of the preceding one, and erroneous systems are handed down together with the languages which are their vehicles. Such are the effects of bad education, and education is bad only inasmuch as it is contrary to nature. "Nature has begun all things, and always aright: this truth cannot be repeated too often."

We imagine that languages would be more perfect if they were the work of philosophers, which is a serious mistake. The languages of the sciences (algebra excepted) have no advantage over other languages. According to Condillac, the earliest vulgar languages must have been the best fitted for reasoning. The development of the ideas and faculties of the soul must have been perceptible in these languages, in which the first acceptation of each word was still known, and in which analogy supplied all the others. They were transparent things, so to speak, through which one could watch the progress of the composition of thought. Their syntax was crystallised logic, and the science of the mind thus spontaneously revealed itself in the structure of language. "Sound metaphysics began before languages, and they owe to it their best qualities. But this metaphysics was then not so much a science as an instinct. It was nature guiding men without their knowing it,

and metaphysics became a science only after it had ceased to be sound."

* *

There is therefore, according to Condillac, a natural method which is the soul of language and science. If we followed it properly, it would lead us infallibly to truth. This method he calls "analysis." In his first work, he contented himself with saying that analysis consists merely in combining and separating our ideas in order to make different comparisons and thus to discover their mutual relation and the new ideas to which they may give rise. This analysis is "the secret of discoveries" because it always takes us back to the origin of things. "It consists," he says again, "in tracing our ideas back to their origin, and in studying their development."

We see even by these definitions, that in Condillac's analysis thought is not opposed to synthesis as decomposition is to composition. It comprehends both processes; there is no reasoning which is not a succession of compositions and decompositions, and the two operations are inseparable. Yet the distinction between analysis and synthesis subsists in Condillac, but in a special sense. To proceed analytically, in his view, is to start from the simple, the primitive, and the particular, proceeding with the help of observation and experience, and reproducing the "development" of things. To proceed synthetically is to start from general and abstract principles, aiming thence to deduce the particular and the concrete,—an ambitious and faulty method which has too often led metaphysicians astray.

If our minds were powerful enough to perceive distinctly, at one glance, a collection of objects or all the qualities of an object and the connexions between these, we should have no need of analysis. Our knowledge would be intuitive and perfect from the first. But it is not so; we first have collective impressions, and in order to transform these into knowledge we must decompose them. We therefore consider one after another the objects which form part of a whole, and compare them in order to judge of their mutual connexion. When we have thus become acquainted with their respective positions, we observe in succession all those that fill the intervals; we compare each of them with the nearest principal object and thus we determine its position. In this way we make out all the objects, the form and situation of which we have discovered, and take them all in at one glance. The order assigned to them in our mind is no longer successive, it has become simul-

taneous. It is the order in which the objects really are situated, and we perceive them all at once distinctly; whence this specific definition of analysis: "To analyze is simply to observe in *successive order* the qualities of an object, in order to assign to them in the mind *the simultaneous order* in which they exist."

But there are many ways of conceiving this successive order that leads to a view, both simultaneous and distinct, of the relations between objects; can it be said that any one of these many is the pre-eminently analytical order? "The whole difficulty," says Condillac, "consists in finding how to begin in order to apprehend ideas in their most essential connexion with one another. I assert that the only combination by which this is to be found is the one which is in accordance with the very genesis of things. We must start from the first idea which must have produced all others." The analytical order is the genetic order. If we knew a sufficient number of facts, and had studied them closely enough, systems would in some sort be self made, as facts would group themselves of their own accord in such an order as to explain one another in succession. We should then find that in every system there is a first fact, which is the beginning of it, and which for this reason might be called the principle, for principle and beginning are two words which have originally the same meaning. Any system which does not thus exactly reproduce the order of the evolution and composition of facts, any system resting on general and abstract principles is arbitrary, and consequently false. The logical order of science coincides with the order in which phenomena are produced in the course of time. In one word, in this empirical conception of analysis the mind is methodically made subordinate to things. It is in things that order is inherent, and the function of the mind consists in reflecting back this order as faithfully as possible, and in being, to use Bacon's expression, a perfect mirror.

The stumbling-block to empiricism of this kind is generally to be found in mathematics and metaphysics. As regards mathematics, Condillac got out of the difficulty by reducing every demonstration to a succession of equivalent propositions "the identity of which is obvious," and is more easily perceived when we use algebraical signs. Nor was metaphysics embarrassing to Condillac, no doubt because he took but little care to make it fit in with the rest of his system. He proves dogmatically the existence of God from the necessity of a first cause and from the existence of final causes. We again meet in him the argument of the watch and the watch-maker, which Voltaire thought decisive. Without knowing the

essence of the soul and of the body, Condillac knows that they are two distinct substances. "The body may be defined as an extended substance, and the soul as a sentient substance. It is sufficient to consider extension and sensation as two incompatible properties, to be convinced that the substance of the soul and that of the body are too widely different substances. Locke was wrong in declaring that it will perhaps be forever impossible for us to know whether God has not endowed some heap of matter shaped in a certain way with the faculty of thinking.—For the subject that thinks must be one. Now a heap of matter is not one; it is a multitude. The soul thus being a different substance from the body, we cannot understand how the latter would act upon it. The body can be only an occasional cause. We must therefore acknowledge that the senses are but the occasional source of our knowledge. Free access is thus left for idealism.

There is no reason why we should question Condillac's sincerity as regards his spiritualistic metaphysics; but the very fact of its occupying so small a place in his system, and being so closely connected with it, is characteristic. It means that psychology was beginning to live an independent life and trying to rely solely on observation and experience. Locke had shown the way; Condillac advanced farther. True, his solutions are still far from perfect. He gives bad definitions of the terms he uses, and commentators in our days are not of one mind as to what he understands by "sensation," "perception," and "nature." No doubt, when he tries to analyze facts, to discover their origin, and to trace back their genesis, he most often construes them with the aid of factors in themselves very complex. Nevertheless he has a precise conception of empirical psychology, and attempts to study the especial share of each of the senses in our knowledge, to analyze habit and instinct, to define the function of the association of ideas, and, in short, to discover the genesis of psychological phenomena. All these points were to be taken up again later on, in accordance with a more prudent and safer method; but at last the questions had been raised, and often with remarkable clearness and pertinency, so that the influence of Condillac upon French thought was long-lived and persistent, and it would not be impossible to find traces of it in what is taught today in our schools.

THE EVOLUTION OF SPEECH.¹

BY PROF. TH. RIBOT.

IN passing from the origin of speech² to the study of its development, we enter upon firmer ground. Although this development has not occurred uniformly in every race, and the linguists—who are here our guides—do not always agree in fixing its phases, it is nevertheless the surest indication of the march of the human mind in its self-analysis in passing from extreme confusion to deliberate differentiation; while the materials are sufficiently abundant to admit of an objective study of intellectual psychogenesis, based upon language.

This attempt has nothing in common with the “general or philosophical grammar” of the beginning of this century. The Idealogues who founded this had the pretension, while taking language as their basis, to analyse the fundamental categories of intelligence: substance, quality, action, relation. A laudable enterprise, but one which, by reason of the method employed, could only be abortive. Knowing only the classical or modern languages, the products of a long civilisation, they had no suspicion of the embryonic phases; accordingly, they made a theoretical construction, the work of logicians rather than of psychologists. Any positive genetic investigation was inaccessible to them; they were lacking in material, and in instruments. If by a comparison borrowed from geology, the adult languages are assimilated to the Quaternary layer; the Tertiary, Secondary, and Primary strata will correspond with certain idioms of less and less complexity which themselves contain the fossils of psychology. These lower forms—the semi-organised or savage languages which are a hundred times more numerous than the civilised languages—are now familiar to us; hence there is an immense field for research and

¹ Translated from the French by Frances A. Welby.

² See the April *Open Court*.

comparison. This retrogression to the primitive leads to a point that several linguists have designated by a term borrowed from biology: it is the protoplasmic state "without functions of grammatical categories" (Hermann Paul). How is it that speech issued from this undifferentiated state, and constituted little by little its organs and functions? This question is interesting to the linguist on certain sides, to the psychologist on others. For us it consists in seeking how the human mind, through long groping, conquered and perfected its instrument of analysis.

I. At the outset of this evolution, which we are to follow step by step, we find the hypothesis of a primitive period, the so-called *roots*, and it is worth our while to pause over this a little. Roots—whatever may be our opinion as to their origin—are in effect general terms. But in what sense?

Chinese consists of 500 monosyllables which, thanks to varieties of intonation, sufficed for the construction of the spoken language; Hebrew, according to Renan, has about 500 roots; for Sanskrit there is no agreement. According to a bold hypothesis of Max Müller, it is reducible to 121, perhaps less, and "these few seeds have produced the enormous intellectual vegetation that has covered the soil of India from the most distant antiquity to the present day.¹ Whatever their number may be, the question for us reduces itself into knowing their primitive intellectual content, their psychological value. Here we are confronted by two very different theses. For one camp, roots are a reality; for the other, they are the simple residuum of analysis.

"Roots are the phonetic types produced by a force inherent in the human mind; they were created by nature," etc., etc. Thus speaks Max Müller. Whitney, who is rarely of the same mind, says, notwithstanding, that all the Indo-European languages are descended from one primitive, monosyllabic language, "that our ancestors talked with one another in simple syllables indicative of ideas of prime importance, but wanting all designation of their relations."

In the other camp it is sustained that roots are the result of learned analysis, but that there is nothing to prove that they really existed (Sayce); that they are reconstructed by comparison and generalisation; that, e. g., in the Aryan languages, roots bear much the same relation to Sanskrit, Greek, and Latin words as Platonic ideas to the objects of the real world" (Bréal). It has been calculated that the number of articulate sounds which the

¹ This list may be found in *The Science of Thought*, p. 406.

human voice is capable of producing amounts to three hundred and eighty-five. These sounds, for physiological reasons, constitute a fundamental theme in the various words created by man. Later on, linguists in comparing the vocables used in different languages, established the frequent recurrence of certain sounds common to several words. These have been isolated, but we must not see in them aught besides *extracts*. Moreover, "the first stammerings of man have nothing in common with phonetic types so arrested in form and abstract in signification, as *dhâ*, to place, *vid*, to see, *man*, to think, and other analogous words."

To sum up. In the first thesis roots come into existence, *ab initio*; words are derived from them by reduplication, flexions, affixes, suffixes, etc.; there is the trunk upon which a whole swarm of languages has proliferated.

In the second thesis, words come first; then the common element, disengaged by analysis, but which never really existed in the pure and primitive condition.

Whether the one opinion or the other be adopted, I see no conclusion to be drawn from it save that the first terms designated qualities or manners of being, varying with the race. The first thesis seems the more apt in revealing to us the primitive forms of abstraction and generalisation. If it be selected, despite its fragility, one finds in the list of roots (even when most reduced) an extraordinary mixture of terms applied to the most disparate things (e. g., tears, break, measure, milk, to choose, to clean, to vomit, cold, to fear, etc.). To assert with Max Müller (from whom I borrow the preceding terms) that "there are the one hundred and twenty-one original concepts, the primitive intellectual baggage of the Aryan family" is to employ an unfortunate formula, for nothing could less resemble concepts than the contents of this list. If the second thesis be adopted, the root then being nothing but "the exposed kernel of a family of words," "a phonogram," analogous to composite photographs, formed like these by a condensation of the similarities between several terms, then clearly primitive abstraction and generalisation must be sought in words, and not in roots.¹

¹ How were primitive terms (roots or words) formed? A much-debated and still unsolved question. Man had at his disposal one primary element, the interjection. By all accounts this remained sterile, unfertile; it did not give birth to words; it remained in articulate language as a mark of its emotional origin. A second proceeding was that of imitation with the aid of sound onomatopœia. From antiquity to the present time, it has been regarded as the parent, *par excellence*. This was accepted by Renan, Whitney, Taylor, H. Paul, etc.; rejected by M. Müller Bréal, P. Regnaud, etc. No one disputes the formation of many words by onomatopœia, but those who question its value as a universal process say that "if in certain sounds of our idioms

II. Leaving this question which, from its relation to that of the origin of speech, shares in the same obscurity, we have further to ask if the primitive terms (whatever nature be attributed to them) were, properly speaking, words or phrases? Did man initially give utterance to simple denominations, or to affirmations and negations? On this point all linguists seem to be in agreement. "Speech must express a judgment." In other words it is always a phrase. "Language is based on the phrase, not on the single word: we do not think by means of words, but by means of phrases."¹

This phrase may be a single word,—or composite, formed by confusion of words as in the so-called agglutinative, polysynthetic, holophrastic languages,—or two words, subject and attribute; or three distinct words, subject, attribute, and copula; but beneath all these forms the fundamental function is unalterably to affirm or deny.

The same remark has been made of children. "We must," says Preyer, "reject the general notion that children first employ substantives, and afterwards verbs. My son, at the age of twenty-three months first used an adjective to express a judgment, the first which he enunciated in his maternal tongue; he said *heiss* (hot) for 'the milk is too warm.' Later on, the proposition was made in two words: *heim-mimi*, 'I want to go home and drink some milk' (*heim*=home, *mimi*=milk). Taine and some others have cited several observations of the same order.

According to some authors, all language that has reached complete development has perforce passed through the three successive periods of monosyllabism, polysynthetism, and analysis; so that the idioms that remain monosyllabic or agglutinative would correspond to an arrest in development. To others, this is a hypothesis, only, to be rejected. However this may be (and it is not a question that we need to examine), it seems rash to assert, with Sayce, "that the division of the phrase into two parts, sub-

we seem to hear an imitation of the sounds of nature, we must recollect that the same noises are represented by quite different sounds in other languages, which are also held by those who utter them to be onomatopœia. Thus it would be more just to say that we hear the sounds of nature through the words to which our ear has been accustomed from infancy" (Bréal). I have observed that those who study the spontaneous formation of language in children, claim for them little onomatopœism. On the other hand, a word created by undoubted onomatopœia is sometimes by means of association, or of strange analogies, transferred successively to so many objects that all trace of the transformations of meaning may be lost, and the imitative origin actually denied. Such was Darwin's case, before cited, where the onomatopœia of the duck finally served to designate all liquids, all that flies, all pieces of money. If the successive extensions of the term had not been observed, who could have recovered its origin?

¹ Sayce, *loc. cit.*, IV., §§ 3-5.

ject and predicate, is a pure accident, and that if Aristotle had been Mexican (the Aztec language was polysynthetic), his system of logic would have assumed a totally different form." The appearance and evolution of analytical language is not pure accident, but the result of mental development. It is impossible to pass from synthesis to analysis without dividing, separating, and arraying the isolated parts in a certain order. The logic of a Mexican Aristotle might have differed from our own in its form; but it could not have constituted itself without fracture of its linguistic mould, without setting up a division, at least in theory, between the elements of the discourse. The unconscious activity by which certain idioms made towards analysis, and passed from the period of envelopment to that of development, imposed upon them a successive order. Polysynthetic languages have been likened to the performance of children who want to say everything at once, their ideas all surge up together and form a conglomeration.¹ Evidently this method must be given up, or we must renounce all serious progress in analysis.

To sum up the psychological value of the phrase, independently of its multiple forms, we may conclude by the following remarks of Max Müller :

"We imagine that language is impossible without sentences, and that sentences are impossible without the copula. This view is both right and wrong. If we mean by sentence an utterance consisting of several words, and a subject, and a predicate, and a copula, it is wrong. . . . When the sentence consists only of subject and predicate, we may say that a copula is understood, but the truth is that at first it was not expressed, it was not required to be expressed; in primitive languages it was simply impossible to express it. To be able to say *vir est bonus*, instead of *vir bonus*, is one of the latest achievements of human speech."²

* * *

The evolution of speech, starting from the protoplasmic state without organs or functions, and acquiring them little by little, proceeding progressively from indefinite to definite, from fluid to fixed state, can only be sketched in free outline. But the successive points of this differentiation, which creates grammatical forms, and

¹ There is in Iroquois a word that signifies, "I demand money from those who have come to buy garments from me." Esquimaux is equally rich in terms of this sort. Yet we must recognise that these immense composite words, themselves formed from abbreviated and fused words virtually imply the beginning of decomposition.

² *Lectures on the Origin and Growth of Religion*, ed. 1891, p. 196.

parts of discourse, are under an objective form the history of the development of intelligence, inasmuch as it abstracts, generalises, analyses, and tends towards an ever-growing precision. The completely developed languages—and we are speaking only of such—bear throughout the print of the unconscious labor that has fashioned them for centuries: they are a petrified psychology.

We must return to the roots or primitive terms, whatever may be their nature. Two distinct categories are generally admitted: pronominal or demonstrative roots, verbal or predicative roots.

The first form a small group that properly indicate rather the relative position of the speaker, than any concrete quality. They are equivalent to here, there, this, that, etc. They are few in number, and very simple in their phonetic relations: a vowel or vowel followed by a consonant. Many linguists refuse to admit them as roots, and think they have dropped from the second class by attenuation of meaning.¹ Possibly they are a survival of gesture language.

The second (verbal or predicative) is the only class that interests us. They have swarmed in abundance. They indicate qualities or actions; that is the important point. The first words denominated attributes or modes of being; they were adjectives, at least in the measure in which a fixed and rigid terminology can be applied to states in process of forming. Primitive man was everywhere struck with the qualities of things, *ergo* words were all originally appellative. They expressed one of the numerous characteristics of each object; they translated a spontaneous and natural *abstraction*: another proof of the precocious and indispensable nature of this operation. From its earliest developments intelligence has tended to simplify, to substitute the part for the whole. The unconscious choice of one attribute among many others depends on various causes; doubtless on its predominance, but above all on the interest it has for man. "A people," remarks Renan, "have usually many words for what most interests them." Thus, in Hebrew, we find 25 synonyms for the observance of the law; 14 for faith in God; 11 for rain, etc. In Arabic, the lion has 500 names, the serpent 200, money more than 80; the camel has 5,744, the sword 1,000 as befits a warrior race. The Lapp whose language is so poor, has more than 30 words to designate the reindeer, an animal indispensable to his life.² These so-called syno-

¹ Whitney, *The Life and Growth of Language*, Chap. X. Sayce, *op. cit.*, VI., 28, rejects them absolutely.

² Renan, *Histoire générale des langues sémitiques*, pp. 128 and 363.

nyms each denominate a particular aspect of things ; they witness to the abundance of primitive abstractions.

This apparent wealth soon becomes an embarrassment and an encumbrance. Instead of 100 distinct terms, one generic substantive, plus one or two epithets, would suffice. But the *substantive* was not born of the deliberate desire to obviate this inconvenience. It is a specialisation, a limitation of the primitive meaning. Little by little the adjective lost its qualificative value, to become the name of one of the objects qualified. Thus in Sanskrit *dēva* (shining) finally signified the god ; *sourya* (the dazzling) became the sun ; *akva* (rapid) the name of a horse, etc. This metamorphosis of adjective into substantive by a specialisation of the general sense occurs even in our actual languages ; as, e. g., when we say in French *un brilliant* (diamond) ; *le volant* (of a machine) ; *un bon* (of bread, counting-house, bank, etc.). What is only an accident now was originally a constant process. Thus the substantive was derived from the primitive adjective ; or rather, within the primitive organism, adjective-substantive, a division has been produced, and two grammatical functions constituted.

Many other remarks could be made on the determination of the substantive by inflexions, declensions, the mark of the gender (masculine, feminine, neuter) ; I shall confine myself to what concerns *number*, since we are proposing to consider numeration under all its aspects. Nothing appears more natural and clear-cut than the distinction between one and several ; as soon as we exceed pure unity, the mother of numbers, plurality appears to us to be homogeneous in all its degrees. It has not been so from the beginning. This is proved by the existence of the dual in an enormous number of languages : Aryan, Semitic, Turanian, Hottentot, Australian, etc. One, two, were counted with precision ; the rest was vague. According to Sayce, the word "three" in Aryan language at first signified "what goes beyond." It has been supposed that the dual was at first applied to the paired parts of the body : the eyes, the arms, the legs. Intellectual progress caused it to fall into disuse.

At the close of the period of first formation which we have been considering, the sentence was only a defaced organism reproduced by one of the following forms : (1) that ; (2) that shining ; (3) that sun, that shining.¹ The verb is still absent.

With it we enter on the period of secondary formation. It was long held to be an indisputable dogma that the *verb* is the word

¹ P. Regnaud, *Origine et philosophie du langage*, p. 317.

par excellence (*verbum*), the necessary and exclusive instrument of an affirmation. Yet there are many inferior idioms which dispense with it, and express affirmation by crude, roundabout processes, with no precision,—most frequently by a juxtaposition: snow white=the snow is white; drink me wine—I drink (or shall drink) wine, etc. Plenty of examples can be found in special works.

In fact, the Indo-European verb is, by origin, an adjective (or substantive) modified by a pronoun; *Bharami*=carrier-me, I carry. It is to be regretted that we cannot follow the details of this marvellous construction,—the result of unconscious and collective labor that has made of the verb a supple instrument, suited for all expressions, by the invention of moods, voices, and tenses. We may note that, as regards tenses, the distinction between the three parts of duration (which seems to us so simple) appears to have been established very slowly. Doubtless it can be asserted that it existed, actually, in the mind of primitive man, but that the imperfection of his verbal instrument failed in translating it. However this may be, it is a moot point whether the verb, at the outset, expressed past or present. It seems at first to have translated a vague conception of duration, of continuity in action; it was at first “durative,” a past which still continues, a past-present. The adjective notion contained in the verb, indefinitely as to time, only became precise by little and little. The distinction between the moments of duration did not occur by the same process in all languages, and in some, highly developed, otherwise like the Semitic languages, it remained very imperfect.¹

The main point was to show how the adjective-substantive, modified by the adjunction of pronominal elements, constituted another linguistic organ, and losing its original mark little by little, became the verb with its multiple functions. The qualificatory character fundamental to it makes of it an instrument proper to express all degrees of abstraction and generalisation from the highest to the lowest, to run up the scale of lower, medium, and higher abstractions. Ex., to drink, eat, sleep, strike;—higher, to love, pray, instruct, etc.; higher still, to act, exist, etc. The supreme degree of abstraction, i. e., the moment at which the verb is most empty of all concrete sense, is found in the auxiliaries of the modern analytical languages. These, says Max Müller, occupy the same place among the verbs, as abstract nouns among the substantives. They date from a later epoch, and all had originally a more

¹ On this point, consult especially Sayce, *op. cit.*, II., § 9, and P. Regnaud, *op. cit.*, pp. 296-299.

material and more expressive character. Our auxiliary verbs had to traverse a long series of vicissitudes, before they reached the desiccated, lifeless form that makes them so appropriate to the demands of our abstract prose. *Habere*, which is now employed in all Roman languages to express simply a past time, at first signified "to hold fast," "to retain."

The author continues, retracing the history of several other auxiliary verbs. Among them all there is one that merits particular mention on account of its divagations: this is the verb *être*, verb *par excellence*, verb substantive, unique; direct or understood expression of the existence that is everywhere present. The monopoly of affirmation, and even the privilege of an immaterial origin have been attributed to it.¹ In the first place, it is not met with under any form in certain languages which supplement its absence by divers processes. In the second, it is far from being primitive; it is derived, according to the idioms, from multiple and sufficiently discordant elements: to breathe, live, grow (Max Müller); to breathe, grow, remain, stand upright (*stare*) (Whitney).

Hitherto we have examined only the stable, solid parts of speech. There remain such as are purely transitive, translating a movement of thought, expressive of *relation*. Before we study these under their linguistic form, it is indispensable to take up the standpoint of pure psychology, and to know in the first place what is the nature of a relation. This can the less be avoided inasmuch as the question has scarcely been treated of, save by logicians, or after their fashion, and many very complete treatises of psychology do not bestow on it a single word.²

"A relation," says Herbert Spencer, "is a state of consciousness which unites two other states of consciousness." Although a relation is not always a link in the rigorous sense, this definition has the great advantage of stating it as a reality, as a state that exists by itself, not a zero, a naught of consciousness. It possesses intrinsic characters: (1) It is indecomposable. There are in consciousness greater and less states; the greater (e. g., a perception)

¹ The word *être* is irreducible, indecomposable, primitive, and wholly intellectual. I know no language in which the French word *être* is expressed by a corresponding word representing a sensible idea. Hence it is not true that all the roots of the language are in last resort signs of sensory ideas." (V. Cousin, *Histoire de la phil. au XIII. siècle*, 1841, II., p. 274.

² For the psychology of relation consult Herbert Spencer, *Psychology*, I., p. 65, II., pp. 360 et seq.; James, *Psychology*, I., pp. 203 et seq. The latter gives the history of the subject, which is very brief, and remarks that the idealogues form an honorable exception to the general abstention. Thus Destutt de Tracy established a distinction between feelings of *sensation* and feelings of *relation*.

are composite, hence accessible to analysis; they occupy an appreciable and measurable time. The lesser (relation) are naturally beyond analysis; rapid as lightning, they appear to be outside time. (2) It is dependent. Remove the two terms with which it is intercalated, and the relation vanishes; but it must be noted that the terms themselves presuppose relations; for, according to Spencer's just remark, "There are neither states of consciousness without relations, nor relations without states of consciousness." In fact: to feel or think a relation, is to feel or think a change.

But this psychical state may be studied otherwise than by internal observation, and the subsequent interpretation. It lends itself to an *objective* study, because it is incarnated in certain words. When I say, red *and* green, red *or* green, there are in either case, not two, but *three* states of consciousness; the sole difference is in the intermediate state which corresponds with an inclusion or an exclusion. So, too, all our prepositions and conjunctions (*for*, *by*, *if*, *but*, *because*) envelop a mental state, however attenuated. The study of languages us that the expression of relations is produced in two ways, forming, as it were, two chronological layers.

The most ancient is that of the cases or declensions: a highly complex mechanism, varying in marked degree with the idioms, and consisting in appositions, suffixes, or modifications of the principal theme.

But these relations have only acquired their proper linguistic organ, specialised for this function, by means of prepositions and conjunctions. They are wanting in many languages; gesture being then substituted for them. The principal parts of the discourse are solitary, juxtaposed without links after the manner of the phrases used by children. Others, somewhat less poor, have only two conjunctions: *and*, *but*. In short, the terms on which devolved the expression of relations are of late formation, as it were, organs *de luxe*. In the analytical languages, prepositions and conjunctions are nouns or pronouns diverted from their primitive acceptance, which have acquired a value expressive of transition, condition, subordination, co-ordination, and the rest. The psychological notion common to the greater number, if not to all, is that of a movement. "All relations expressed by prepositions can be referred to repose, and to movement in space and time, i. e., to those with which the locative, accusative (movement of approximation) and ablative (movement of departure) correspond in declension."¹ It may be admitted that this consciousness of movement, of change,

¹ Regnaud, *op. cit.*, pp. 304 et seq.

which is no more, fundamentally, than the sense of different directions of thought, belongs less to the category of clear notions than to that of subconscious states, of tendencies, of actions, which explains why the terms of relation are wholly wanting, or rare, and only conquered their autonomy at a late period.

With these, the progressive work of differentiation is accomplished. Discourse has now its materials and its cement; it is capable of complex phrases wherein all is referred and subordinated to a principal state, contrary to those ruder essays which could only attain to simple phrases, denuded of connective apparatus.

We have rapidly sketched this labor of organo-genesis, by which language has passed from the amorphous state to the progressive constitution of specialised terms and grammatical functions: an evolution wholly comparable with that which, in living bodies, starts from the fecundated ovule, to attain by division of labor among the higher species to a fixed adjustment of organs and functions. "Languages are natural organisms, which, without being independent of human volition, are born, grow, age, and die, according to determined laws." (Schleicher.) They are in a state of continuous renovation, of acquisition, and of loss. In civilised languages, this incessant metamorphosis is partially checked by enforced instruction, by tradition, and respect for the great literary works. In savage idioms where these coercive measures are lacking, the transformation at times occurs with such rapidity that they become unrecognisable at the end of a few generations.

Spoken language, as a psycho-physiological mechanism, is regulated in its evolution by physiological and psychological laws.

Among the former (with which we are not concerned), the principal is the law of phonetic alteration, consisting in the displacement of an articulation in a determined direction. It is dependent on the vocal organ; thus, after the Germanic invasion, the Latin which this people spoke fell again under the power of physiological influences which modified it profoundly.

Among the latter, the principal is the law of analogy, the great artisan in the extension of languages. It is a law of economy, the basis of which is generalisation, the faculty of seizing on real or supposed resemblances. The word remains invariable, but the mind gives it different applications: it is a mask covering in turn several faces. It suffices to open a dictionary to see how ingenious and perilous is this unconscious labor. Such a word has only a few lines; it has no brilliant record. Such another fills pages;

first we see it in its primitive sense ; then—from analogy to analogy—from accident to accident—it departs from it more and more, and ends by having quite a contrary meaning.¹ Hence it has been said that “ the object of a true etymology is to discover the laws that have regulated the evolution of thought.” Among primitive people, the process that entails such deviations from the primitive sense, is sometimes of striking absurdity ; or at least appears to us as such by reason of the strange analogies that serve the extension of the word. Thus : certain Australian tribes gave the names of mussels (*myum*), to books because they open and close like shell-fish ; and many other no less singular facts could be cited. Much more might be said as to the rôle of analogy, but we must adhere to our subject.

In conclusion : it is to be regretted that linguistic psychology attracts so few people, and that many recent treatises on psychology, excellent on all other points, do not devote a single line to language. Yet this study, especially if comparative, from the lowest to the most subtle, would throw at least as much light on the mechanism of the intelligence as other highly accredited processes. Physiological psychology is pursued with ardor, on the right supposition that if the facts of biology, normal and morbid, are studied by the naturalists and the doctors, they may be so also by the psychologists, after their mode. So too for languages ; comparative philology has its aim, psychology another proper to it. It is impossible to believe that any one, armed with sufficient linguistic instruction, who consecrates himself to this task, will expend his labor in vain.

¹ It is superfluous to give examples of such a well-known fact. See Darmesteter, *The Life of Words*.

MOHAMMEDANISM AND CHRISTIAN MISSIONS.

BY THE REV. W. P. REEVE.

THAT Mohammedanism offers peculiar difficulties to the efforts of Christian missions, those most interested in the active work of evangelisation make no attempt to deny. While its political power continues unarrested in the slow and certain process of decay, no successful attack has yet been made in the name of Jesus Christ upon its spiritual dominion. Not only does it maintain its influence over its original conquests, but it continues to put forth amazing powers of expansion. Its adherents to-day can hardly be estimated at less than two hundred million souls.¹ In India and Burmah, in China, in Australasia, it is rapidly advancing, and authorities are agreed that the negro races of Central Africa are destined soon to reinforce its strength. Mohammedanism stands to-day, as it long has stood, one of the most formidable problems of missionary enterprise. And yet, although a clear apprehension of the question obviously constitutes the first step for its final solution, it remains a problem little understood. With the view, therefore, of ascertaining what peculiar difficulties Mohammedanism presents to Christianity, and the basis of these difficulties in the religion itself, I propose to examine, first of all, the religion, and then briefly to notice the ethical and political system in which it logically results.

I.

Though the essence of Mohammedan belief is contained in the famous proposition which constitutes the test of conversion: "There is only one God, and Mohammed is the Prophet of God," the contents of the faith may be conveniently considered under the following divisions: (1) The idea of God. (2) Mohammed and

¹ *Statesman's Year Book.*

the Prophets. (3) The Koran. (4) Predestination. (5) Eschatology.

1. The source of the difficulties which Mohammedanism presents to Christianity unquestionably lies in the nature of its theology. If it be assumed that the diffusion of Christianity is conditioned to a large extent by the previous formation of receptivity for it, an examination of the Mohammedan conception of God at once reveals what formidable obstacles are presented to missionary enterprise.

Without entering into any discussion of Mohammed's religious development, it is enough to state that he early displayed a desire for a higher and more consistent belief than the polytheism of Arabia. After years of spiritual unrest, he reached at length the great conception of the Unity of God. In the words of the Koran : "God is one God, the eternal God ; He begetteth not ; neither is He begotten ; and there is not any one like unto Him."¹ In this rigid monotheism God is conceived as an absolute, transcendent Will. Although He is invested in name with the highest ethical attributes, it is apparent that He is conceived under physical categories. He is a great, self-centred Ego, desiring existence solely for His own advantage. Since the Highest Goodness must by the law of its being go out in relations of love to others, He is not a truly ethical nature, He is not a personal God. The pure transcendence of the idea of God at once rules out all possibility of vital relationship between God and the world. To the Mohammedan mind the problem of how a transcendent Deity can be at the same time immanent, never occurs. The results of this theology are apparent in every department of Mohammedan life. As this investigation proceeds, they will one by one come out. Before entering upon this detailed development, however, it will be advisable to state the characteristics of the Christian conception.

There are essential points of difference. In contrast with the Mohammedan idea of God as an irresistible, transcendent Might, who addresses humanity only through the medium of Law, Christianity presents as its very essence the doctrine of the Divine Fatherhood. In the Christian system God is conceived as personal, and therefore as entering into relations of love with men. The Old Testament doctrine of the Divine Holiness is developed in Christian thought into the doctrine of the Divine Personality. The problem of transcendence and immanence is for Christianity an ab-

¹ Sura. CXII. This idea of the Unity of God must have resulted from some conception of the Divine character.

solutely necessary problem. The solution is found in the Incarnation, and the doctrine of the Incarnation results in and is bound up with the doctrine of the Trinity. The divine life enters with all its redemptive energies into the life of man, and its complete revelation is forever sealed in the person of Jesus Christ.

In the attempt to reconstruct the Mohammedan idea of God, the missionary declares the Divine Sonship of Christ. The essence of his message is, that he who has seen the Son has seen the Father, and that he who has faith in the Son shall be justified and made at one with the Father. But in preaching this Gospel he is met at once with a peculiar difficulty. Since the Mohammedan idea of a purely transcendent God affords no basis for an Incarnation, there is the danger, to which experience bears ample witness, that this doctrine will be misunderstood and denied. No pious Mussulman considers the question open. As to the merits of Jesus he has a verdict from the Infallible Prophet, and that verdict rejects altogether the doctrine of His Sonship with God. Upon what grounds is this judgment based? Why did Mohammed reject Christianity?

Surprise is often expressed at the rise of an independent monotheistic faith six centuries subsequent to the foundation of the Christian Church. If Christianity in its purity had reached Arabia, it may well be questioned whether history would have known Mohammedanism. Unfortunately, however, as Mohammed saw it, the original spirituality of the faith lay obscured beneath a fungus growth of superstition. Far from affecting Arabian heathenism, it rather itself exhibited a thinly disguised idolatry. Vows were openly paid to relics and images. A long train of martyrs, saints, and angels interrupted the communion of the human spirit with its God. From Judaism the great iconoclast derived much of his system, but Christianity he saw only as a warning and a failure. His conception of God was formed independently of Christian thought. And the views concerning fundamental Christian doctrines which he has transmitted to his followers are the results of the test which he applied to those doctrines in his great premise of God as a transcendent Will.

Mohammed took up the history of Christ and set the stamp of his authority on a Christology which is the despair of modern missions. Of the Canonical Gospels¹ he apparently knew little or noth-

¹ Stanley's *Eastern Church*, p. 263. The only passages of the N. T. suggested in the Koran are those referring to the Paraclete in St. John and the account of the birth of the Baptist in St. Luke. See also Sir William Muir's *Mohammed*, Vol. II., pp. 313 and 278.

ing. Taken as his ideas were from the traditions based on the Apocryphal Gospels, he had poor guides in the attempt to measure the proportions of that great figure. In Christ, however, he acknowledged the highest merit. Next to himself, He was the greatest of the Prophets.¹ He had the power of performing miracles.² He was taken up into the immediate Presence of God.³ The miraculous nature of his birth is repeatedly affirmed,⁴ and the doctrine of the Immaculate Conception of the Virgin is all but accepted.⁵ But on the premises of his theology which admitted of no real communion between God and the world, and which is opposed in its essence to the doctrine of a Divine Spirit indwelling in humanity, the ascription to Christ of Divine Sonship appeared to Mohammed nothing less than a blasphemous insult to the uniqueness and unity of God. He refused to believe that Christ claimed it Himself, and he was led to understand it, as Islam understands it still, in the sense of physical paternity. On this point the Koran is explicit: "Those who dare to say Jesus, the son of Mary, is the son of God, are infidels."⁶ And again: "They say the Merciful hath gotten offspring; now have ye done a monstrous thing; almost might the very heavens rend thereat and the earth rend asunder, and the mountains fall down in fragments, that they ascribe a son to the Merciful, when it becometh not the Merciful to beget a son. Verily there is nobody in the heavens nor in the earth that shall approach the Merciful but as a servant."⁷ Such is the attitude of Mohammed and Mohammedanism on the Incarnation. Herein is presented to Christianity a peculiar difficulty; for it is obvious that from no religion except an abstract monotheism could such a difficulty be advanced.

It is significant also that Mohammed denies the Crucifixion. To his theology it could have no relation and it is out of harmony with the position which he assigns to Christ as his own greatest forerunner. We have in this an illustration of the peculiar opposition with which Islam meets Christianity at so many points. In addressing Mohammedanism the conditions are very different from those which attend the preaching of the Gospel to a people who know nothing of Christ. In the latter case no settled presuppositions weaken the force of the message. However great the other

¹ Sura II., 254.

² *Ibid.*, III., 40

³ *Ibid.*, XIX., 20.

⁴ *Ibid.*, III., 30.

⁵ *Ibid.*, III., 30.

⁶ *Ibid.*, V., 19.

⁷ *Ibid.*, XIX. Mohammed held that some one else who deserved such a death, even Judas himself, was substituted for Christ on the cross. Christ was taken up into heaven, and at the last day will accuse the Jews because they rejected him as a Prophet, and the Christians because they received him as God. *Ibid.*, III., 49. IV., 156.

difficulties, at any rate the real doctrine of Christ has not been anticipated by a false one, nor receptivity for the whole truth deadened by the prior acceptance of a half-truth. Mohammed, however, passed judgment on the Christian revelation. Islam has a Christ of its own. And because of the very recognition He receives as Man and Prophet, missionaries find it all the more difficult to obtain for Him recognition as God and Redeemer.

The doctrine of the Trinity is the theological bulwark of the doctrine of the Divinity of Christ. In view of the Mohammedan attitude on the Incarnation, a presentation to Islam of the Trinitarian concept of God is absolutely necessary. History, moreover, forces the discussion. The echoes of the Athanasian struggle penetrated to Arabia, and Mohammed came in contact with Christianity at a time when the standing of a Christian was determined by his attitude on the Trinity. He has accordingly pronounced upon it, and the Mohammedan world is by no means unaware that such a doctrine is characteristic of Christianity. Everything in the relations between Christianity and Islam points to another Trinitarian controversy.

As it attracted the attention of Mohammed, the doctrine of the Trinity had undoubtedly degenerated into tritheism. The sect of the Collyridians, which became notorious in Arabia, openly adored the Virgin, and the Trinity as it was presented to Mohammed consisted of God, Christ, Mary. Under any circumstances the difficulty will be so to explain the doctrine that it may not be mistaken for tritheism. To every Mohammedan the words of the Koran are likely to recur: "They surely are infidels who say that God is the third of three; for there is no God but one God." "Say not three; forbear; it will be better for thee. God is only one God."¹ After the example of Mohammed, his followers are jealous of the great canon of the unity of God. How to present the doctrine of the Trinity so as to give no foundation for the view that it threatens the divine unity, is the problem which confronts Christianity.

Here, then, is a situation of peculiar difficulty. To the adherents of a religious system which involves in its thought of God neither an Incarnation nor a trinity, is to be preached a religion which is bound up with both. When the attempt is made to reconstruct the thought of God peculiar to the former, it is absolutely necessary for the missionaries of the latter to preach both the Incarnation and the Trinity. And yet the difficulty is that with the

¹*Ibid.*, V., 77. IV., 6.

adherents of the former both these doctrines are in danger of being rejected for the express reason that they are inconsistent with its conception of God.

It is not, however, by any abstract analysis that the full significance of this Mohammedan idea of God for the present discussion can be understood. In order to estimate the fanaticism it inspired, and the true measure of that hostility towards Christianity in which it resulted, it is necessary briefly to consider its history.

Mohammedanism in its very origin was a protest. Bursting forth as the culmination of religious forces which had long been preparing Arabia for monotheism, it came as a revolt from all that threatened or denied the Divine Unity. It was the impassioned assertion to a world, which knew not or had forgotten God, of the Divine Existence and Omnipotence, of the reality of man's dependence, and the necessity of his submission.¹ No existing system displayed the truth. The religions of the world were corrupt and abominable. Idolater and Magian, Jew² and Christian, each in his way denied or insulted the unapproachable majesty of Allah. The time of vindication had arrived. God, through Mohammed, had decisively spoken. And the nations must be brought by those who heard to a speedy recognition of the one true faith.

Not only does the fundamental religious duty of submission to God take the form of devotion in extending his kingdom upon earth,—it distinctly justifies the use of force for religious ends. The Christian revelation of the Divine Love must secure its converts by the agency of spiritual influence. Its only triumphs must be moral triumphs. The Mohammedan faith, on the contrary, knows nothing of true personality. The Supreme Spirit does not condescend to enter into the life of humanity, and through a spiritual process win humanity to Himself. God is rather conceived as the type of an Eastern despot. Refusal to do him homage is rebellion, and rebellion must be suppressed by the sword. Such was the theory which Mohammed, after the Hegira, urged both by precept and example. It was a theory thoroughly congenial to the military temper of the Saracens. It inspired and appropriated to the cause of religion a tremendous secular force. But it is unnecessary to claim for it anything of conscious adaptation. Instead of marking

¹ Maurice, *Religions of the World*, p. 23. An admirable discussion of this point. The terms "Islam" and "Moslem" are both derived from a root meaning "submission to" and "faith in God."

² Mohammed accused the Jews of worshipping Ezra. *Ibid.*, IX., 30.

a decline in the Prophet's moral enthusiasm, it springs spontaneously from the character of his theology. As the result of that theology the Church and State are one, and the use of force in the cause of religion becomes a sacred duty. God demands a Holy War. "Fight on, therefore, till there is no temptation to idolatry and the religion becomes God's alone."¹

From these circumstances there resulted a mood of fanaticism, the most intense and sustained in the history of religion. That fanaticism, unfortunately for the missions of to-day, was early directed against Christianity. I have already given the grounds upon which Mohammed rejected the Christian religion. Upon those grounds the conquest of Christendom became the settled policy of Islam. In Syria and Egypt, in Africa and Spain the Mohammedan arms were successful. Moslem historians relate of the Caliph Omar that, during the ten years of his reign, 1,036 towns were captured, 4,000 Christian churches destroyed, and 4,000 mosques erected in their stead. In the Middle Ages the Christian crusades deepened the sense of hostility. And when, finally, the Ottoman Turks rose to predominance in the Mohammedan world, they vigorously took up the policy of universal domination, captured Constantinople, and menaced for two hundred years the safety of Europe.

As the result, therefore, of the historical situation in which the Mohammedan idea of God took form, it encouraged the feeling of superiority, stimulated and justified aggression, and brought with it to the Islam of to-day a deep sense of enmity towards the Christian faith. Christian missionaries stand face to face with the most discouraging of all difficulties, that of a relentless opposition to their efforts, based on history, and kept alive by religious zeal. Nor is there satisfactory evidence that this spirit is on the wane. In 1857 it instigated the Indian mutiny. In 1884 it inflamed the Soudan. It is seen to-day in the Armenian massacres. In independent Mohammedan states it is a crime for a Moslem to become a Christian. In Morocco the Government has ordered the missionaries to withdraw. In Algeria, owing to popular tumult, the French discourage all missionary effort.² The most extensive work in the Mohammedan field is that of the Church Missionary Society, and to the spirit of fanaticism the last report bears painful witness. One convert in Persia is imprisoned; another beaten by a mob; several have actually been murdered.³ Even in India Missionaries

¹ *Ibid.*, VIII., 40.

² *Methodist Review*, July, 1896.

³ Church Missionary Society Report, pp. 116, 119.

are threatened and subjected to violence ;¹ converts are persecuted and their lives attempted.²

2. A further examination of this religious system reveals a still greater difficulty. In presenting the doctrine of the person of Christ, missionaries find confronting them the doctrine of Mohammed's supernatural call, and the whole power of his influence on the Moslem world.

Though the founder of a religion, Mohammed occupies in it no such position as that of Christ in Christianity. Not only is He the founder, Christ is also a constituent element and the central fact of His faith. Among the religions of the world Christianity stands distinct as pre-eminently the religion of redemption. Its characteristic feature is the union of the divine and human in the person of Christ, the Redeemer and Perfecter of humanity. When compared with Christ, Mohammed discharges no strictly religious function, just as, when compared with Christianity, Mohammedanism is not strictly a religion. But from the relative point of view, the function which he does discharge is just as important for such a religion as Mohammedanism, as that of Christ is for such a religion as Christianity. The Mohammedan idea of God, indeed, postulates the prophetic office. To an Incarnation it is opposed. But God, though transcendent, does not remain altogether aloof from the life of man. He requires obedience and worship, and His will is declared by his prophets. While of these Mohammed recognises no less than 124,000, he singles out for special distinction the five great names of Adam, Noah, Abraham, Moses, and Jesus Christ, who successively mark the five periods into which, as his philosophy conceives, all previous history falls.³ To these five periods correspond five revelations, each of which, though adequate for its age, is superseded in the succeeding era. Nor does the world receive the full revelation, until he himself comes forward, with the commission of God, to speak the final word, and establish the absolute religion. As revelation reaches its height in him, it therefore closes with him. He is the last and the greatest of the prophets. He is in fact The Prophet. In the great dogma which constitutes the Mohammedan confession of faith, his position is defined with emphatic precision: "There is only one God, and Mohammed is The Prophet of God." He has united himself in popular imagination with the name of God Himself, and founded his influence on the vitality of a religious principle.

Mohammedanism, therefore, is based on the authority of Mo-

¹ *Ibid.*, 170, 181.

² *Ibid.*, 185, 207.

³ Sale's Koran. The Preliminary Discourse, p. 99.

hammed. While that authority stands, the religion will stand. Upon his word all questions, religious and moral, depend for an answer. In every controversy a reference to that word is the one and only procedure. Beyond the limits therein set down the human spirit cannot advance. The search for truth resolves itself into the function of interpretation. It is not by an appeal to reason that such a system can be shaken, because it is not by such an appeal that it is defended. Its apologetic is that of a great scholastic philosophy, which substantially accepts as its premises the positions already assumed by an ecclesiastical power. The task of Christianity would be simpler if Islam did not so rigidly exclude the idea of the efficacy of the human reason as a medium for the testing of truth. The very fact that the adherents of an alien faith are willing to submit their claims to rational consideration, is itself an indication of intellectual receptivity, and therefore a condition favorable to the extension of the Christian religion. But the premises of Mohammedan controversialists are always dogmatically assumed. From the doctrine of a transcendent God the conception of authority logically results. Where the ideas of a distant Deity and a finished revelation prevail, the past inevitably enslaves the present, and the human mind, dominated by the dogma of infallibility, and fixed in the contemplation of the faith once for all delivered, loses the incentive and the means of progress.

From his authoritative position as the mediator of an absolute revelation, three other lines of influence proceed which converge to support the ascendancy of the Prophet.

(1) The belief is held that on the Day of Judgment he will act as Intercessor on behalf of the faithful.¹

(2) Attention is fixed upon him as the highest type of moral excellence. His example, as embodied in the Hadis, or Sacred Traditions, is held to be absolutely binding in the conduct of life. The study of these traditions is a distinct science, and their administration a regular profession.

(3) In current legend the historical Mohammed has been idealised into a being endowed with supernatural attributes. This mythical Prophet has been formed on the model of Jesus Christ. The doctrine of Pre-existence takes the form of the theory of the "Light of Mohammed" which was with God before Creation. Like the birth of Christ, his birth was announced from above. He was subjected to a Satanic temptation. He was able to solve enigmas put to trouble him. Unclean spirits obeyed him and he had

¹ T. P. Hughes. *Notes on Mohammedanism*, p. 260.

the power of performing miracles. His death was accompanied by portents, and he rose again from the dead. Of the difficulty which springs from this tendency, Dr. S. W. Koelle, long a missionary to Islam, remarks: "It is mainly this unnaturally magnified, this un-historical and fictitious Mohammed, who sways the hearts of the Moslems and keeps them from recognising in Jesus Christ the true Saviour of man."¹

The very abstractness of the Mohammedan idea of God tends to concentrate the imagination of the faithful upon the figure and history of Mohammed. It must be acknowledged that in this sense Islam is a personal religion. Personal it can never be in the sense of bringing man into living communion with God. But personal it is, since it was founded by a person, and since the mind of its adherents is fixed upon him. The theory of Mohammed's imposture is no longer tenable. He made, however, high claims, which, if Christianity is to prevail, must be discredited. And yet, behind what fortifications those claims lie entrenched!

3. The pretensions and doctrines of the infallible Prophet are definitely embodied in an infallible book. The missionary who defends the claims of Christ with the Christian Bible, is met by the disciple of Mohammed with the Koran. Shortly after the Prophet's death his utterances were collected by Abu Bekr, his successor, into a single volume. Othman, the third Caliph, revised this edition, ordered the destruction of all existing copies, and sent out the Koran to the faithful with the great advantage of a uniform text.

The Mohammedan theory of inspiration goes beyond those extreme positions still held concerning the Scriptures by conservative Christians. The Koran was not only verbally inspired; it existed from all eternity. To Mohammed its various lines or Suras were revealed in ecstasy, or dictated by the angel Gabriel. Against the New Testament, Mussulman theologians claim that it does not contain the original Gospels, but merely the *Hadis* or traditions of Matthew, Mark, Luke, and John. Any such conception as that of personal inspiration is of course foreign to the thought of Islam. To question the so-called divinity or "uncreated nature" of the Koran is the height of blasphemy.

The doctrine of the divinity of the Koran is supported by its literary beauty. Its poetic quality delights the Eastern imagination. Since no translation can reproduce that quality, those unacquainted with the original have often advanced unfavorable opin-

¹ S. W. Koelle. *Mohammed and Mohammedanism*. London. 1889. P. 245.

ions.¹ But where Arabic culture prevails the verdict is unanimous. As to the merits of the style even Mohammed's enemies agree with his friends, and may fairly be said to have confirmed his boast: "If men and genii were assembled together that they might produce a book like the Koran, they must fail." And again, in support of his prophetic claim:² "If ye be in doubt as to our revelation to our servant then produce a Sura like unto it, and summon your witnesses."³

In Judaism, after the exile, the growing transcendence of the idea of God coincided with the formation of the Canon, and it is certain that the canonised text of the Koran is the result of the concept of God, to which it bears witness. Of this theology and the whole system of Islam, the sacred book is the bulwark. Its precepts are thoroughly disseminated throughout all classes of Mussulman society. In that society it constitutes the norm of thought and action. And its possession of absolute authority, inseparably associated with the power of Mohammed, lies directly in the path of Christianity.

Nothing could more clearly prove how these influences have fixed the character of Islam than the famous episode of the Matozilites. In their history the difficulties of Christianity in its conflict with Mohammedanism are in a manner foreshadowed. Under the influence of Greek philosophy they arose in Persia during the eighth century. Their true distinction lay in the effort to develop the ethical aspects of the conception of God. But it was the intellectual modifications which this involved that gave them prominence. Their efforts bring out in striking relief the essential unity of the rational spirit and the ethical will. Aiming to moralise the idea of God, they inevitably vindicate the rights of reason. Styled by themselves "defenders of God's unity and righteousness," they are named by others "the freethinkers of Islam." Though it is important to notice that they rejected the doctrine of predestination, the most significant of all their positions, as suggesting what chiefly retarded intellectual and moral advance, was their attitude concerning the Koran. They rejected the doctrine of its eternal existence, declaring that it had been "created" and was therefore liable to error. For a time they were supported by the more liberal Caliphs, but they eventually succumbed to the invincible orthodoxy of Islam. Their teaching, indeed, was out of harmony with its genius. "Not in the God of the Matozilites, whose essence was righteousness, but in that of orthodoxy, the

¹R. B. Smith. *Lectures on Mohammedanism*, p. 151. ²Sura, XVII., 90. ³Sura, II., 21.

Almighty God, bound to no law but His own arbitrary will, did the great multitude recognise their Allah and the Allah of Mohammed. Unfortunately they were not mistaken.”¹

4. The idea of the freedom of the human will depends upon the conception of a personal God. God’s Love conditions His Omnipotence, and that love demands the free response of moral beings. As to God, the emphasis in Islam is altogether upon the fact of Supremacy; as to man, upon the duty of Submission. That life of spiritual communion which demands the fact of freedom is altogether foreign to its thought. We have, as a result, the doctrine of God’s Absolute Decree and Predestination both of good and evil. Whatever has or shall come to pass in this world, whether good or bad, proceeds entirely from the Divine Will, and is irrevocably fixed and recorded in the “preserved tablet.”²

There are two directions in which this belief operates against the progress of Christian missions. One is characteristic of that revived and militant Mohammedanism which recalls in its missionary activity the early victories of the faith. The other is a mark of those countries and classes in which Islam has run its course and produced its normal effect. Instead of the positive opposition which springs from enthusiasm, they present the inert resistance of that moral paralysis which results from fatalism.

(1) In its impression on strongly religious natures the doctrine of predestination intensifies the idea of the Greatness of Allah, and renders those who hold it fiercely and irrationally opposed to the advances of other systems. Particularly is this the case with the great reforming sect of the Wahabis, a body of zealots who reproduce the mood of the primitive Mohammedans, and constitute the true spiritual force of modern Islam. They advocate a return to the simplicity of the original Mohammedan Church, and above all to its determination to spread the Truth by the sword.³ The conviction that everything has been ordained makes them indifferent to consequences, and, as the history of India proves, they are ready to take any risk in their hatred of Christianity. They have immense influence in Bengal, where through their efforts Mohammedanism has at length become the dominant religion.⁴ And that influence is employed with telling effect to the prejudice of the Christian religion.

¹ Kuenen. *National and Universal Religions*, p. 52.

² Sura, LXXXV., 22.

³ Sir William Hunter. *Our Indian Mussulmans*, pp. 50, 58, 60, and 64.

⁴ The last Indian census (1891) proves this. In a population of 40,000,000 they outnumber the Hindus by 1,500,000.

(2) From the dualism which ultimately results where God is conceived as the author both of good and of evil, the Mohammedan mind has struggled in vain to escape. During the period of first enthusiasm that dualism remains implicit, as it did with the Saracens, and as it does with the Wahabis. But in the course of normal life it is bound to emerge. The pressure of physical evil soon brings the problem home, and the descendants of those who counted it the highest happiness to die for the cause of God find themselves—

Impotent pieces of the game He plays
Upon this checker-board of nights and days;
Hither and thither moves, and checks, and slays;
And one by one back in the closet lays.¹

Man looks in, to himself, and beyond, to the world, and seeks in vain to reconcile his environment and his will. There is a power in the universe making for evil, and against that power it is hopeless to strive. The consequent fatalism develops in two extremes, each the logical complement of the other, and each unfavorable to the advance of Christianity—immorality on the one hand, and monasticism on the other.²

5. An elaborate and decisive eschatology crowns the Mohammedan system. In support of his religion the Prophet enlisted the aspiration for immortality, and set forth a view of the future state peculiarly adapted both by hope and fear to strengthen the hold of his faith on the Oriental imagination. For this reason the doctrine is related to the present discussion. Because it assists Islam, it is a difficulty for Christianity, and therefore demands consideration.

Mohammed's eschatology is in thorough harmony with his idea of God. Where God enters into no relations with men in this world, no basis is afforded for a consummation of relations in the next. A theology which forbids true ethical life in time and space knows nothing of spiritual growth or perfected union with God in the life beyond the grave. The conception of Heaven is static and sensuous. The conception of Hell, with one arbitrary exception, is static also. The Day of Judgment makes the cardinal division between Believers and Infidels. Those of the former who have obeyed the Law pass at once over the Bridge of Sirat³ into the

¹ The verse of Omar Khayyam is a suggestive commentary on Mohammedan theology.

² There are thirty-two leading orders of Dervishes, all rigidly ascetic. (Hughes's *Mohammedanism*, p. 237.)

³ Sale's *Preliminary Discourse*, p. 120.

bliss of Heaven; those who have not fall into the purgatorial fire of the first circle of Hell. Their faith, however, and the Prophet's intercession will ultimately procure for them admission into paradise. No Believer, whatever may be his sins, will be condemned to eternal damnation. From this fate, on the other hand, no Infidel can possibly escape. The intensity of the torture will accord with the magnitude of the aberration, and in connexion with the efforts of Christian missions it is important to observe that conversion to an alien religion marks the climax of human turpitude. For Apostates, for those "who have become Unbelievers after they have embraced Islam"¹ is reserved the supreme agony of Hawia, or the Bottomless Pit.

The Mussulman is persuaded to steadfast allegiance, not only by the threat of torments to be suffered, but also by the promise of pleasures to be enjoyed. If he continues faithful, all the delights of a carnal paradise will be his forever, and a divine dispensation will avert the disaster of satiety. The descriptions of Mohammed are conceived in a vein of true Eastern imagery, and exercise the greatest influence over the sentiment of the people.

The power of these beliefs is not to be destroyed by preaching, as against them, the eschatology of Christianity. That eschatology is a corollary from the conception of a personal God. And it is the doctrine of a personal God and His manifestation in Jesus Christ that must primarily be proclaimed to Islam. Against the acceptance of this doctrine Mohammedan eschatology directly and indirectly operates, and therefore deserves the brief notice it has here received.

Besides the doctrinal positions above examined, Mohammed instituted a system of practical religion which controls the daily lives of his followers and militates through the mechanical force of custom against the formation of receptivity for Christianity. The five "pillars" of practice are: (1) The Recital of the Creed. (2) The Five Daily Prayers. (3) The Legal Alms. (4) The Fast of the month Ramazan. (5) The Pilgrimage to Mecca.

Concluding at this point the investigation of Mohammedanism in its purely religious aspect, there yet remains briefly to be considered the bearing of its ethical and political developments upon the problem of Christian missions. The difficulties already brought out are directly due to the religion. Those about to be suggested are its indirect results.

¹ Sura, IX.

II.

True morality must always rest, not on the submission of humanity to an Omnipotent Will, but on the relation of humanity to a Personal God. True morality, therefore, Islam has not, and on its premises can never have. Its ethic is necessarily legalistic and external. Mohammed set forth what he conceived to be the will of God in a definite code, and compliance with its regulations is the highest reach of Moslem virtue. To this entire conception Christianity is of course opposed. In particular, however, there are three positions which occasion difficulty to Christian missions: (1) Mohammed's legislation as to slavery. (2) As to the use of liquor. (3) As to the position of women.

1. By regulating, Mohammed recognised the institution of slavery. As to the treatment of slaves he made several salutary reforms, and undoubtedly his system marks a relative advance. But he implanted no ethical principle which could result in enfranchisement. The slavery of Islam is bound up with the Law of Sale, the Law of Marriage, and the Law of Inheritance. And Christianity, which in its essence makes for freedom, is on that ground resisted by all the power of a vested interest.

2. Nothing is more characteristic of Mohammed's legislation than his prohibition of the use of liquor. Drunkenness is the one vice really feared in tropical countries and generally condemned as a breach of divine law.¹ The Mussulman moralist, in that spirit of adaptation which so deeply influenced his policy, appropriated this dominant idea, and forbade the use of wine. He sowed no seed which would result in temperance or abstinence, and Christianity, though it sows this spiritual seed and creates the character that makes in all things for moderation, is condemned and opposed because, as to the use of wine, it declares no absolute veto.

3. In regard, finally, to the position of women, it must be conceded that Mohammed remedied grave abuses. He gave women rights of property. He placed restrictions on polygamy. He regulated divorce. Here again, however, the fatal defect of his theology appears in his ethic. It does not ground the principle of individuality. It does not stimulate progress. Woman remains in Islam to-day just where Mohammed left her. And, after all, he

¹ In the South Sea Islands there is a curious illustration of this sentiment; one of the most common "taboos" is that on liquor. The Mormon Church is increasing there owing, for one reason, to its veto on drink. See Stevenson's interesting discussion in *The South Seas*, Chapter IV.

made large concessions to lust. He fixed the number of wives at four; but he set no limit to the property of masters in their female slaves. As in the prohibition of wine his moral law satisfied the prevailing idea, so here it gratifies the prevailing passion, of the tropics. In opposing the advance of the Christian religion, with its high ideal of womanhood and its spiritual conception of marriage, Islam is reinforced by the strength of a natural appetite to which its own ethic allows immoderate satisfaction.

III.

On the political side, Islam has not essentially advanced beyond the stage of tribalism. All law is divine. Church and State are identical, and the result of their union is the peculiar institution of the Caliphate. The Sultan of Turkey is the Caliph of Islam, whose duty it is to enforce all the provisions of Sacred Law. For a Moslem to become a Christian is not only a sin; it is also a crime. And within the jurisdiction of the Caliph, now *de facto* confined to Turkey, that crime can be punished with death. It is true, indeed, that, on certain terms, Christianity has always been tolerated in Mohammedan states. The Prophet expressly enacted that conquered Christians who refused to embrace Islam should be allowed, nevertheless, on the payment of a tax, to reside in the dominions of the Caliph. But this toleration was never intended to imply that a Mohammedan subject could become a Christian convert. For diplomatic reasons the Sultan has from time to time modified the law. That these concessions were only apparent came out in 1875, when, in reply to the complaints of missionaries, it was declared through the British representative that "the right of making proselytes from the religion of the state neither had been nor was intended to be granted by the Turkish Government."¹ In confirmation of this, Dr. Koelle, an eminent missionary already referred to, reports to his society that "no church or special building intended for public Christian service for Turks would have any chance of being authorised by government. Any government in Turkey which would carry out the principles of religious liberty faithfully, openly, and fully, would be accused by every conscientious Moslem of infidelity to their religion and of treachery to their state."² Missionary effort in Turkey is accordingly confined to the Oriental Christians. In its political manifestation the Mohammedan religion is unalterably opposed to the advance of Christianity.

¹ Diplomatic Correspondence, 1875.

² Report to the Christian Missionary Society.

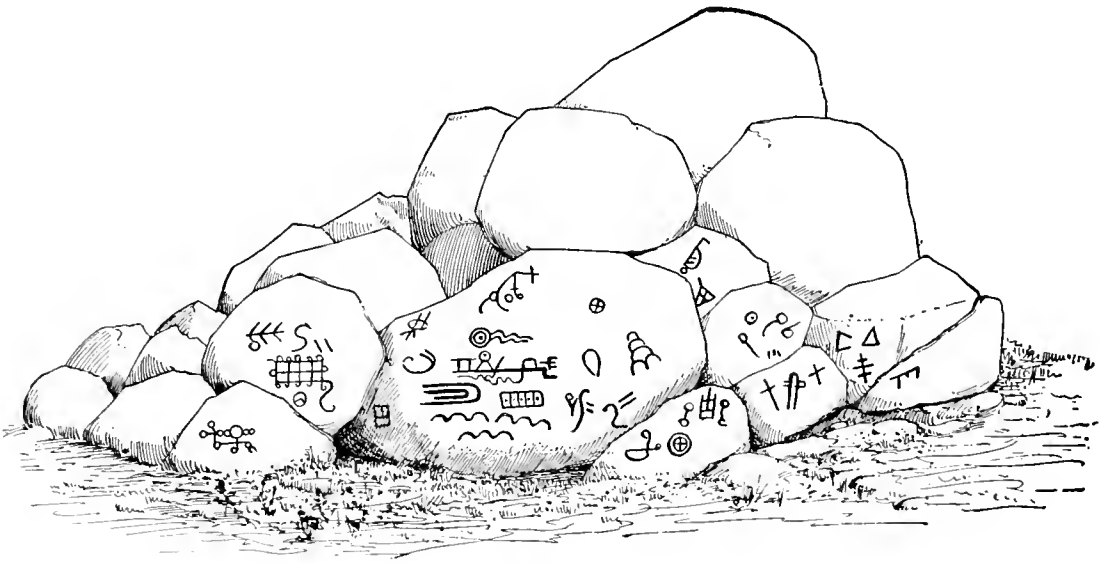
In accordance with the plan originally suggested, I have attempted to point out the difficulties which Mohammedanism presents to Christianity. In this investigation it has been my aim to show how these difficulties logically result from the fundamental antagonism between the idea of God in the one religion, as Absolute Will, and the idea of God in the other, as Absolute Personality. Rejecting the possibility of a living relation between Deity and humanity, the Mohammedan conception develops the doctrine of a completed revelation, places the world under the dominion of law, and renders equally impossible both the progress of thought and the growth of a truly moral order. Not only, therefore, does it summarily deny the doctrines of the Incarnation and the Trinity, characteristic of the Christian theology, but, in its reliance on dogma in matters of belief and on legalism in matters of life, it displays tendencies the very opposite of those which are required to win acceptance for Christianity.

From this examination, however, made, as it necessarily has been, from the standpoint of Christianity, the absolute religion, it would be erroneous to conclude, either that the Mohammedan system has not even relative merit, or that the fixed character of that system presents to Christianity an insoluble problem. In many countries Mohammedanism proved, and in many it proves to-day, a relative benefit. It freed Arabia from idolatry and Persia from Zoroastrianism. It releases the Hindu from caste, and raises the negro above fetishism. This benefit, however, is no more than relative. Neither in its theology nor in its morality, can it seriously be argued that Islam is a universal religion. Impervious though it appear to be, when its course is run it will be disintegrated. And Christianity, adjusted to races whose needs Mohammedanism can no longer supply, will take its place.

THE CROSS AMONG THE NORTH AMERICAN INDIANS.

BY THE EDITOR.

THE significance of the cross among the North Americans has received much attention from the various investigators of the Bureau of Ethnology and the Smithsonian Institution, and we are



RATTLESNAKE ROCK, MOJAVE DESERT, CALIFORNIA.

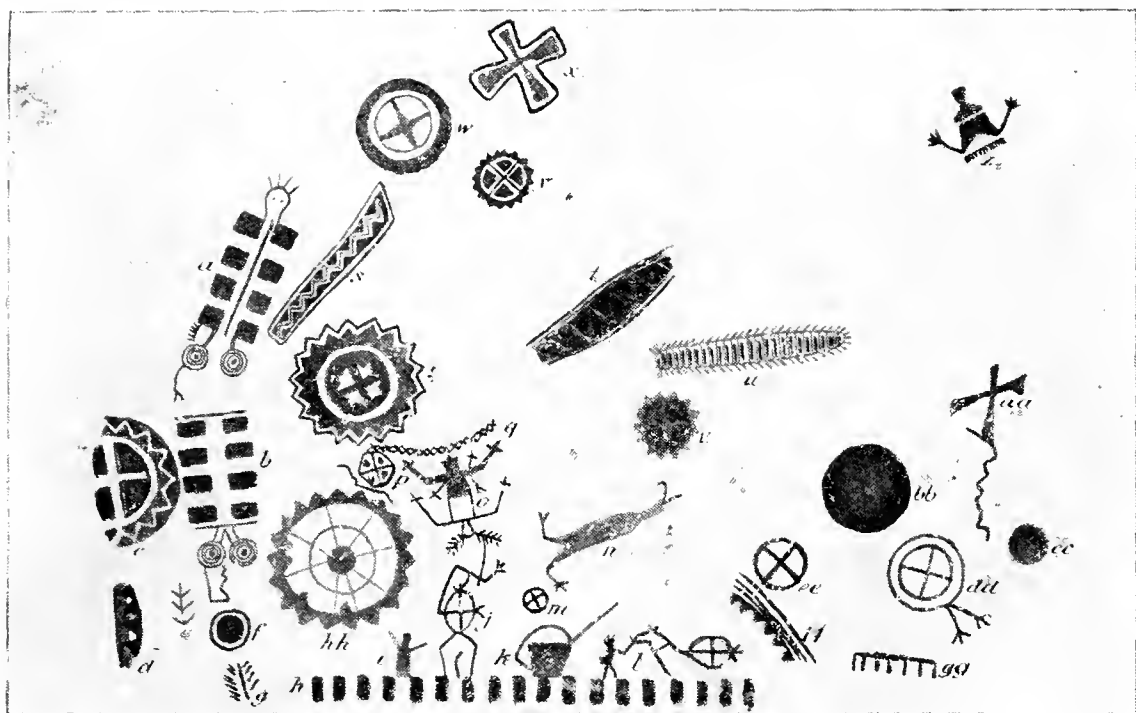
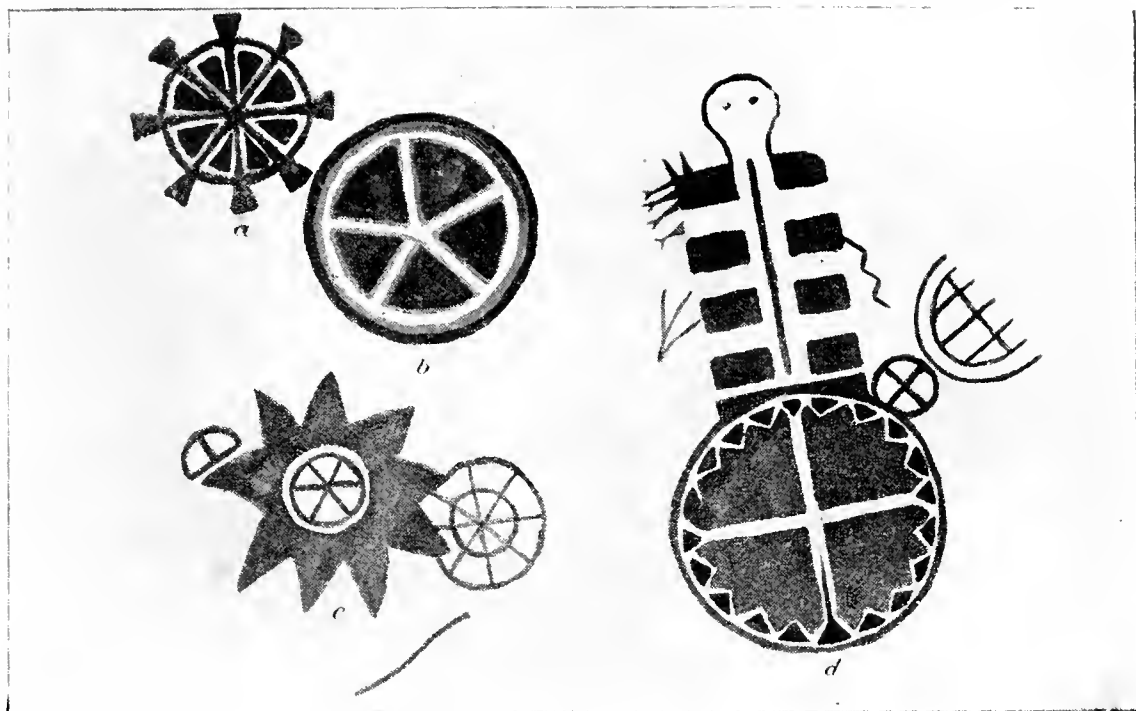
Containing one Latin (†), one Greek (⋈), one treble (⦿), and one disc (⊕) cross.

led to the conclusion that here as in Mexico the cross was one of the commonest religious symbols. To be sure, we must be careful not to accept crosses as genuinely Indian unless they are of undoubted pre-Christian origin. Says Mr. William H. Holmes:¹

“From the time of La Salle down to the extinction of the savage in the middle Mississippi province, the cross was kept constantly before him [the Indian], and its presence may thus be accounted for in such remains as post-date the advent of the whites. Year after year articles of European manufacture are being discovered in the most unexpected places, and we shall find it impossible to assign any single

¹ Annual Report of the Bureau of Ethnology, 1880, p. 269.

example of these crosses to a prehistoric period, with the assurance that our statements will not some day be challenged. It is certainly unfortunate that the Amer-



PETROGLYPHS IN SANTA BARBARA COUNTY, CALIFORNIA.¹

[With wheel stars and wheel crosses.]

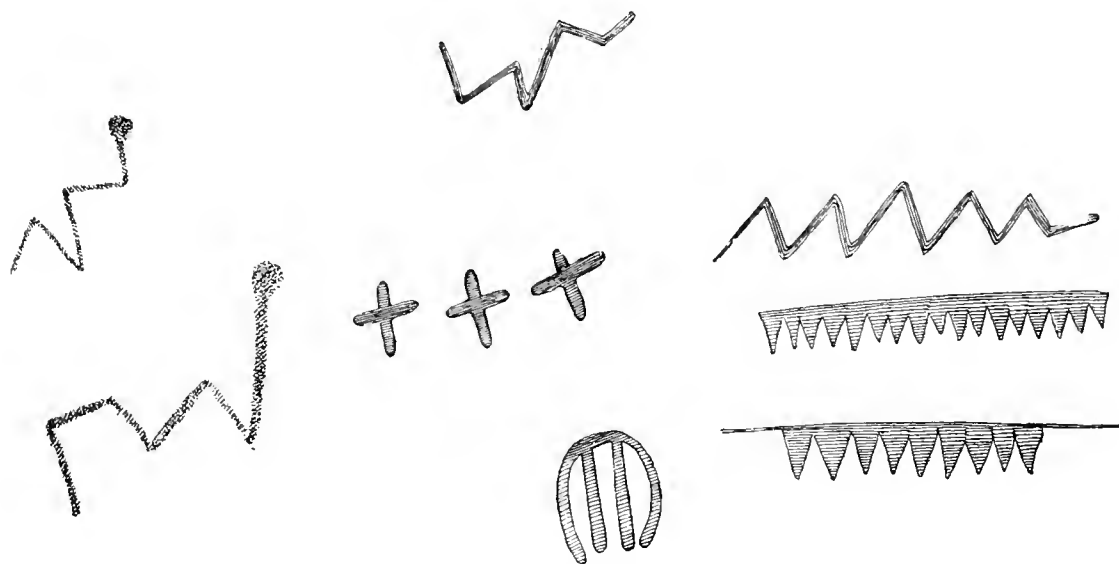
ican origin of any work of art resembling European forms must rest forever under a cloud of suspicion. As long as a doubt exists in regard to the origin of a relic, it

¹ *A. R.*, 88-89, figs. 32 and 33, pp. 70 and 71.

PETROGLYPHS AT OAKLEY SPRING, ARIZONA.¹

[It is impossible to give an incontrovertible explanation of the various disc-crosses, some of which stand and others slant.

The cross on the heart which occurs several times will at once remind us of the Egyptian symbol of the same appearance. It is probably a coincidence without any significance, for it is used to represent a cross-bearing mask. Cf. *A. R.*, 88-89, pp. 505-506.]

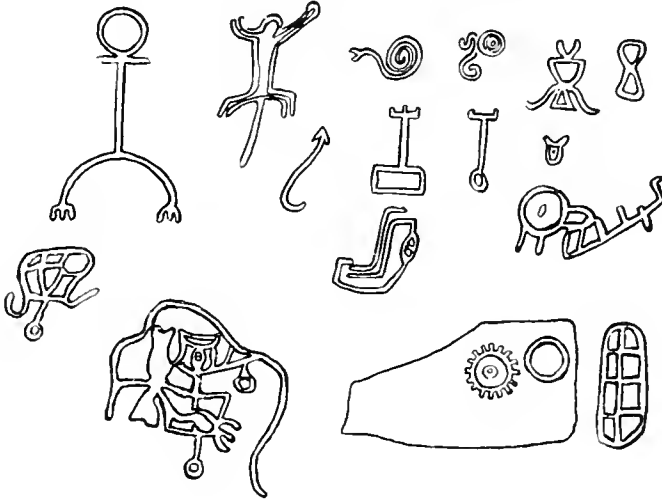
PETROGLYPHS NEAR SAN MARCOS PASS, CALIFORNIA.²

¹ *A. R.*, 88-89, fig. 437, p. 329.

² *A. R.*, 88-89, p. 63.

is useless to employ it in a discussion where important deductions are to be made. At the same time it should not be forgotten that the cross was undoubtedly used as a symbol by the prehistoric nations of the South, and consequently that it was probably also known in the North. A great majority of the relics associated with it in ancient mounds and burial-places are undoubtedly aboriginal."

While we must be very careful not to build theories on its significance, there can be no doubt about the prevalence of the



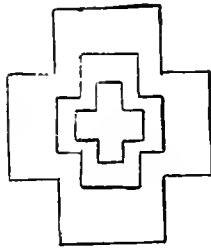
BRAZILIAN PETROGLYPHS.¹

One figure is in its upper part similar to the Egyptian key of life.

Indian cross all over the continent. Most of the rock-inscriptions, the petroglyphs so called, contain crosses of all sizes and shapes, some of which are solar symbols (e. g., those of Oakley Springs, Arizona), others are meant to be stars (e. g., the crosses of the



NICARAGUA CROSSES (ISLAND OF CEIBA)
REPRESENTING RAIN.²



MAYA SYMBOL WITH CROSSES,
SIGNIFYING WOOD.³

Eskimo), or clouds, or symbols of rain; still others represent animals, such as alligators, or birds in flight, or men with outstretched arms.

Mr. Holmes has collected a great number of representations of the cross without being able to come to a definite conclusion or explanation. He says:

¹A. R., 88-89, fig. 1113, p. 692.

²A. R., 88-89, fig. 1234, p. 730.

³A. R., 88-89, fig. 1233, p. 729.

"In all the examples given it is a simple and symmetrical cross, which might be duplicated a thousand times in the religious art of any country. A study of the designs associated with the cross in these gorgets is instructive, but does not lead



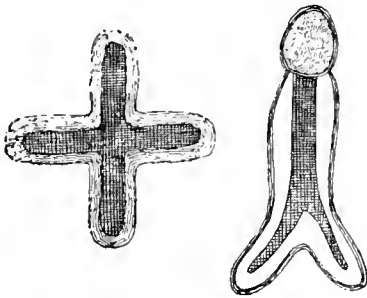
SPIDER-GORGET FROM A STONE GRAVE IN ST. CLAIR COUNTY, ILLINOIS.¹

to any definite result. In one case the cross is inscribed upon the back of a great spider; in another it is surrounded by a rectangular framework of lines, looped at the corners, and guarded by four mysterious birds, while in others it is without attendant characters; but the workmanship is purely aboriginal."

Concerning the cross on the back of the spider, Mr. Holmes says (*A. R.*, 80-81, pp. 287-8):

"It has been suggested that it may have been derived from the well-defined cross found upon the backs of some species of the genus

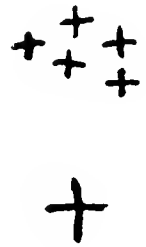
Atta, but there appears to be good reason for believing otherwise. The cross here shown has a very highly conventionalised character, quite out of keeping with the realistic drawing of the insect, and, what is still more decisive, it is identical with forms found upon many other objects. The conclusion is that the cross here, as elsewhere, has a symbolic character."



PETROGLYPHS IN NAJOWE VALLEY, CALIFORNIA.²



THE CROSS OF THE SUN.³



CROSSES OF THE ESKIMO.

Mr. Garrick Mallery says in the tenth annual report, 1888-89, p. 724:

"The 'Greek' (i. e., the equilateral) cross represents to the Dakota the four winds, which issue from the four caverns in which the souls of men existed before their incarnation in the human body. All 'medicine men,' i. e., conjurers and magicians, recollect their previous dreamy life in those places and the instructions then received from the gods, demons, and sages. They recollect and describe their pre-existent life, but only dream and speculate as to the future life beyond the grave.

¹ *A. R.*, 80-81, Plate LXI, facing p. 288.

² *A. R.*, 88-89, fig. 1223, p. 696.

³ *A. R.*, 88-89, fig. 28, p. 67.

⁴ *A. R.*, 88-89, fig. 1228, p. 727.

"The top of the cross is the cold all-conquering giant, the North-wind, most powerful of all. It is worn on the body nearest the head, the seat of intelligence



SPIDER-GORGET FROM MOUNDS IN ST. CLAIR COUNTY, ILLINOIS.¹

and conquering devices. The left arm covers the heart; it is the East-wind, coming from the seat of life and love. The foot is the melting burning South-wind, in-



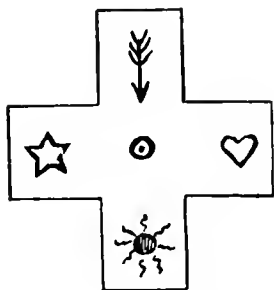
SPIDER-GORGET FROM A MOUND IN MISSOURI.

dicating, as it is worn, the seat of fiery passion. The right arm is the gentle West wind, blowing from the spirit-land, covering the lungs, from which the breath at

¹A. R., 80-81, Plate LXI, facing p. 288.

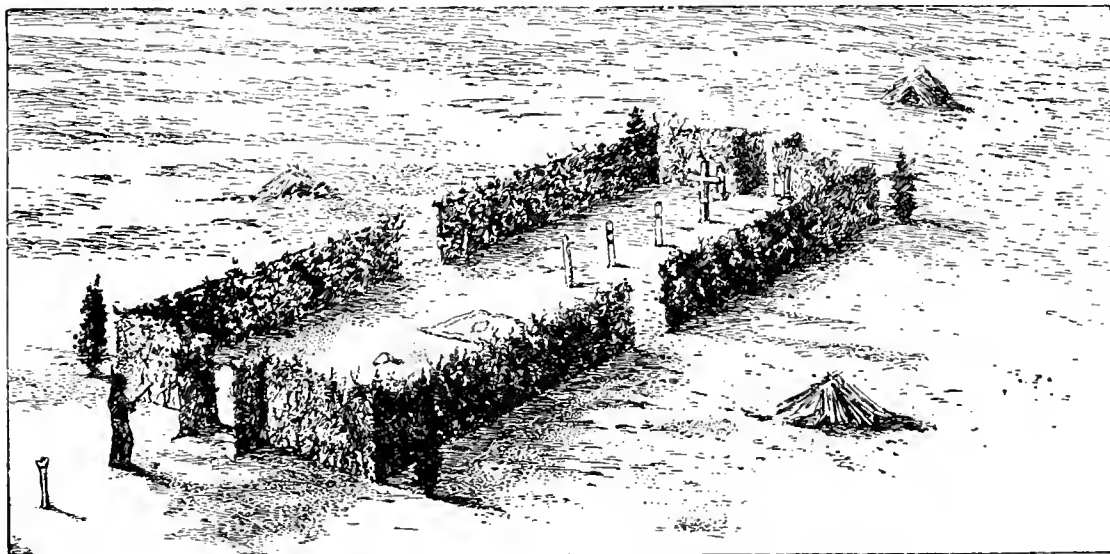
last goes out, gently, but into unknown night. The centre of the cross is the earth and man, moved by the conflicting influences of the gods and winds.

"Among the Ojibwa of northern Minnesota the cross is one of the sacred symbols of the society of the Midê or shamans, and has special reference to the fourth degree. A neophyte who has been advanced to the third initiation or degree, is instructed in ritualistic chants purporting to relate the struggle between Mi'nabô'zho, the mediator between the Ojibwa and Ki'tshi Ma'nidô, and the malevolent Bear spirit, which contest occurred when Mi'nabô'zho entered the fourth degree structure at the time when the first Indian was inducted therein for initiation.



THE EQUILATERAL CROSS
OF THE DAKOTA.

"The structure as erected at this day is built in the form of an oblong square having openings or doors at the four cardinal points. At these openings Mi'nabô'zho appeared and shot into the inclosure charmed arrows, to expel the horde of demons occupying the sacred place, and the Bear spirit was the last to yield to his superior powers. The openings being opposite to one an-



THE CROSS IN THE MEDICINE LODGE.

other, north and south and east and west, suggested to Mi'nabô'zho the cross, which is now erected whenever a third degree Midê receives this last and highest honor.



THE CHRISTIAN LABARUM.



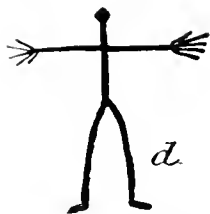
AN AMERICAN LABARUM.

"The cross is made of saplings, the upright pole reaching the height of four to six feet, the transverse arms being somewhat shorter, each being of the same length as that part of the pole between the arms and the top. The upper parts are painted white, or besmeared with white clay, over which are spread small spots of red, the

latter suggesting the sacred shell, or *mêgis*, the symbol of the order. The lower arm or pole is squared, the surface toward the east being painted white, to denote the



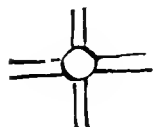
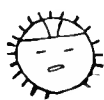
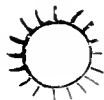
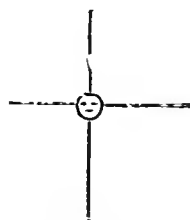
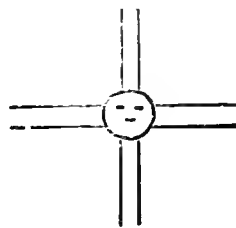
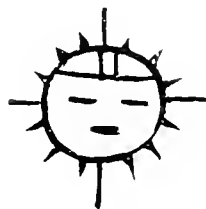
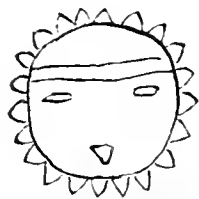
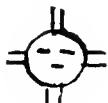
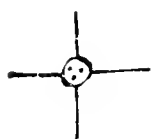
NECKLACE.



SOME OF THE ROCK SCULPTURES DISCOVERED IN
OWENS VALLEY, SOUTH OF BENTON, CALIFORNIA.¹

REPRESENTING A
MEDICINE MAN.

source of light and warmth. The face on the south is green, denoting the source of the thunder bird who brings the rains and causes the appearance of vegetation; the surface toward the west is covered with vermillion and relates to the land of the



SIGNS OF THE SUN AND OF STARS.² (Oakley Springs, Arizona; and other places.)

setting sun, the abode of the dead. The north is painted black, as that faces the direction from which come affliction, cold, and hunger."

¹ *A. R.*, 88-89, fig. 1230, p. 728.

² *A. R.*, 88-89, scattered on pp. 694-697.

The Maltese cross (✠) is a symbol of virginity among the Moki, and is worn in the hair by the maidens of the tribe, but its shape is frequently conventionalised into a simple cross.

Among the Kiate'xamut, an Innuït tribe, the medicine man wears on his head a cross which represents the demon that is under his control.



SHELL-GORGET OF THE MISSISSIPPI MOUND-BUILDERS.¹

That the Indian prayer-stick bears a certain resemblance to the cross is immaterial, but may be mentioned as a strange coincidence.

The characters scratched on the prayer-stick are the picture writing which continued in use long after the arrival of the whites, and of which interesting instances are quoted in the "Jesuit Rela-

¹*A. R.*, 80-81, Plate LVIII, facing p. 282. Similar designs of four birds' heads with a sun and a cross in the centre are frequently found in North America. For other specimens and further comments see William H. Holmes's essay, *Art in Shell of the Ancient Americans*, *A. R.*, 80-81, pp. 179-305.

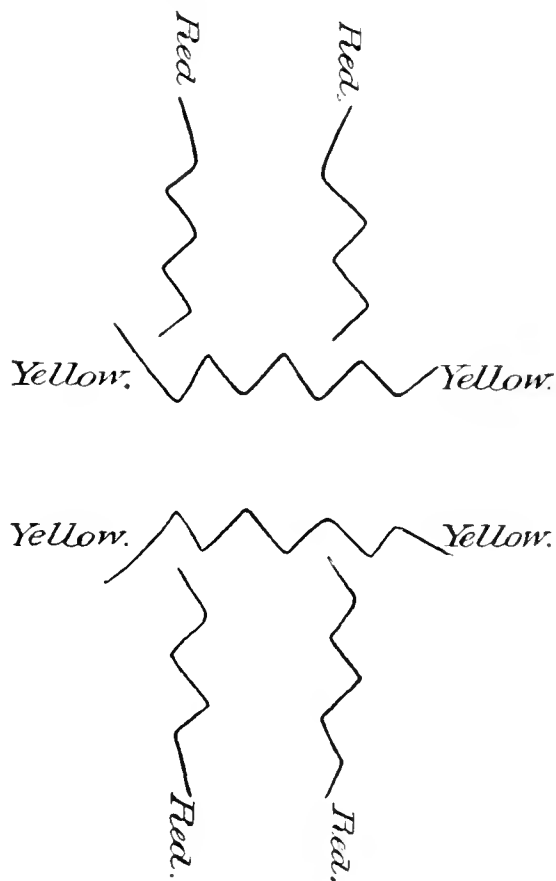
tions of 1646" of the Algonquins of the St. Lawrence river and by Charles Wiener in his *Péron et Bolive* (1880).

Crosses of various descriptions, painted on buckskin, are used as phylacteries. We reproduce two of them. The zigzag lines of the one represent snakes, and the cross formed by them was called by the owner "the black wind." The significance of the other cross has not been determined. Both pieces of buckskin contained a number of mysterious things which were tightly wrapped and deemed to be of great efficacy.

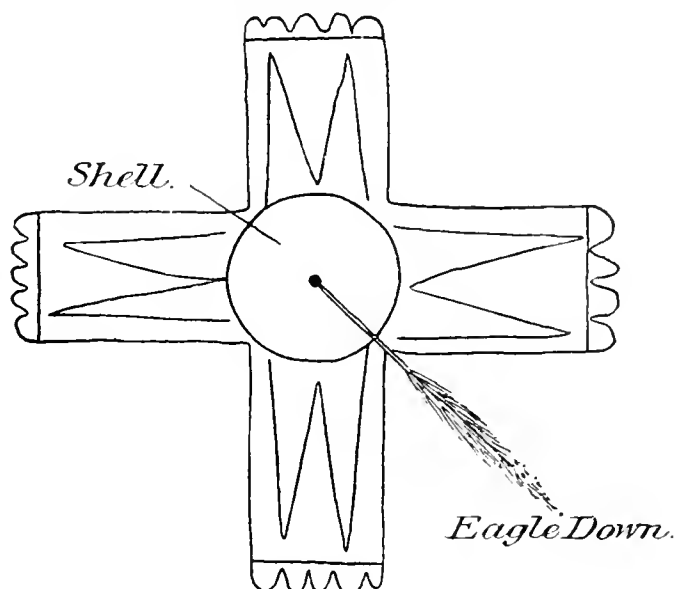
The most interesting crosses, the arms of which are painted in different colors, are found on medicine sashes and shirts. The Ethnological Bureau possesses several fine specimens, and we reproduce here as an interesting example the design of an Apache mantle of invisibility, of which Mr. Mallery says:

"It is a cloak or mantle made from the skin of a deer, and covered with various mystic paintings. It was made and used by the Apaches as a mantle of invisibility, that is, a charmed covering for spies which would enable them to pass with impunity through the country, and even through the camp of their enemies. The fetishistic power depends upon the devices drawn." (*A. R.*, 1888-1889, p. 503.)

Another magic mantle is described as follows:



PHYLACTERIES DRAWN ON BUCKSKIN



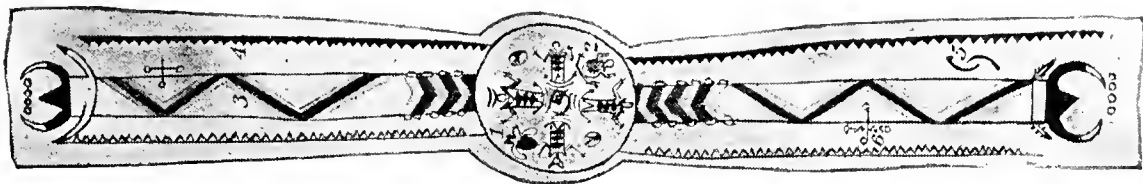
PHYLACTERY.



APACHE MANTLE OF INVISIBILITY.¹

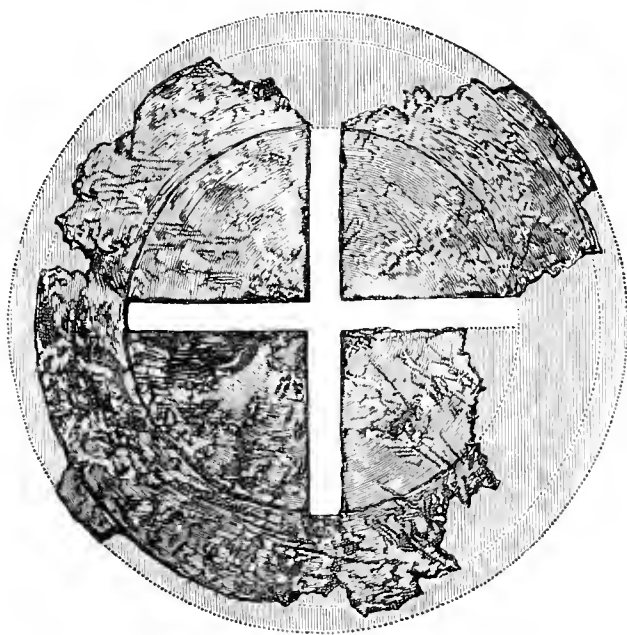
¹ From *A. R.*, 88-89, Plate XXXIII, facing p. 504.

"A similar but not identical pictographic fetish or charm is described and illustrated by Capt. Bourke as obtained from a Chicarahua Apache, which told when his ponies were lost, and which brought rain. The symbols show, inter alia, the rain cloud, and the serpent lightning, the raindrops and the cross of the winds of the four cardinal points." (*Ibid.*)



APACHE MEDICINE SASH.¹

The cross which appears in the Apache medicine sash, reproduced from Mr. Bourke's essay on "Medicine Shirts and Sashes" (*A. R.*, 1887-1888, p. 593), consists of four demons standing in the four quarters of the world. Between them four amulets can be seen, a hoddentin bag containing sacred flour (1), a crab (2), and two other things. From this central place, which I deem to be the home of the winds, streaks of lightning, called Tzi-Daltai (3), issue on either side in the form of zigzag lines, ending in heads reminding one somewhat of a pinchbug. The saw-like streaks may represent thunder.²



CROSS ON A COPPER PLATE FOUND IN AN OHIO MOUND.³

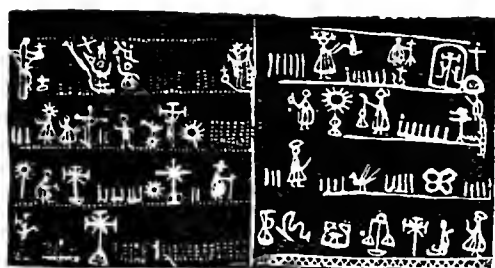
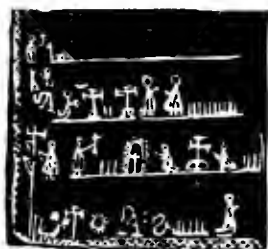
Two Apache medicine shirts are most beautifully reproduced in colors by the Bureau of Ethnology in their *Annual Report*, 1887-1888 (Plates VII. and VIII.). The centre of the one shows a Maltese cross whose arms are blue, green, red, and yellow; the other exhibits among many curious designs in a most prominent position a bluish, equilateral cross mounted on a ball divided into four quadrants which are black, red, blue, and yellow. Thus the whole figure presents the appearance of the cross-bearing globe

¹ *A. R.*, 87-88, fig. 448, p. 593.

² I am unable to explain the curved lines at (5) and the two little crosses, one of which is marked (6).

³ *A. R.*, 88-89, fig. 1226, p. 725.

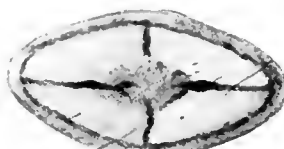
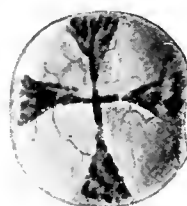
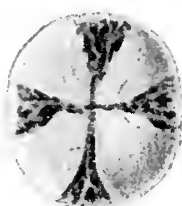
such as is used by European monarchs as an emblem of royal power.



THE STORY OF CHRIST IN PERUVIAN PICTOGRAPHY BEFORE THE INVENTION OF WRITING.¹

Mr. Bourke says of the medicine-shirts:

"The symbolism is different for each one, but may be generalised as typical of the sun, moon, stars, rainbow, lightning, snake, clouds, rain, hail, tarantula, centipede, snake, and some one or more of the 'kan' or gods."



CROSSES ON DICE (used for playing dice).

Considering the many things a cross stands for, we must expect to find it in the pictographic writing of the American Indians; and a glance at a sample of an old Peruvian manuscript found at

¹ *A. R.*, 88-89, p. 672. The same method of writing prevailed in North America.

Sicasica in the valley of Pancactambo, given by Wiener, amply justifies this assumption.

Pictography prevailed also among the North American Indians before the invention of writing in letters, and the first accounts of the story of Christ were written by the natives in this manner.

"Connected with this topic is the following account in the *Jesuit Relations of 1646*, p. 31, relative to the Montagnais and other Algonquins of the St. Lawrence river, near the Saguenay: 'They confess themselves with admirable frankness; some of them carry small sticks to remind them of their sins; others write after their manner, on small pieces of bark.' "



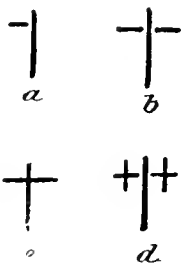
SICASICA MANUSCRIPT. PICTURE WRITING OF AMERICAN INDIANS.¹

The cross is a symbol of varying significance, and we must be on our guard before we identify its usage in diverse parts of the world and even on the same continent. One instance will be sufficient to show how easy it is to make a mistake and how ridiculous and preposterous a substitution of our own views and associations for the notions of other people may become. Mr. Garrick Mallery gives the following explanation of the significance of the Latin cross among the Dakota Indians :

"The same disposition of straight lines which is called the Latin cross was and is used by the Dakota to picture or signify both in pictograph and gesture sign, the mosquito-hawk, more generally called dragon-fly. The Susbeca or mosquito-

¹A. R., 88-89, p. 672. The designs are red and blue.

hawk is a supernatural being. He is gifted with speech. He warns men of danger. He approaches the ear of the man moving carelessly or unconcernedly through the deep grass of the meadow or marsh—approaches his ear silently and at right angles, and says to him, now alarmed, 'Tci'-'tci'-'tci!'—which is an interjection equivalent to 'Look out!' 'You are surely going to destruction!' 'Look out!' 'Tci'-'tci'-'tci!'

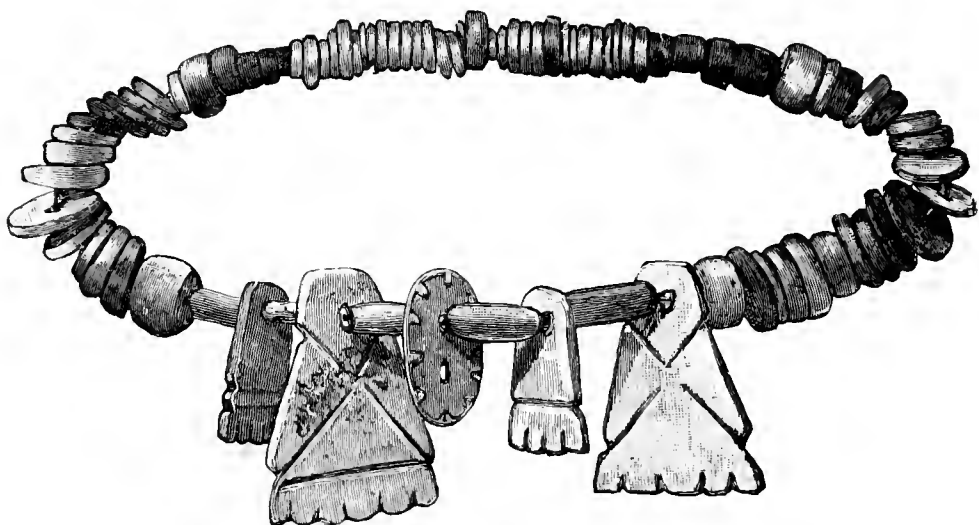


THE DRAGON FLY
CROSSES OF THE
DAKOTA.¹

"Now the mosquito-hawk is easily knocked down and caught and has a temptingly small neck. But woe to the man or woman or child who with the cruelty commonly practiced on all living things by Indians of all ages and states, dares to wring off his head. Whoever shall do this, before the winter comes shall be beheaded by the detested Ojibwa. It is true, for long ago a reckless young warrior feeling annoyed or insulted by the infernal 'Tci'-'tci'-'tci!' so unceremoniously uttered in explosive breaths near his ear, tried it, and his headless trunk was found ere he escaped from the swamp.

"The cross has its proper significance in this use not only in representing quite faithfully the shape of the insect but also the angle of his approach.

"One reason for the adoption of the dragon-fly as a mysterious and supernatural being, is on account of its sudden appearance in large numbers. When in the still of the evening, before the shades of darkness come, there is heard from the meadow a hum as of the sound of crickets or frogs, but indistinct and prolonged; on the morrow the Susbeca will be hovering over it; it is the sound of their coming, but whence no man kens."



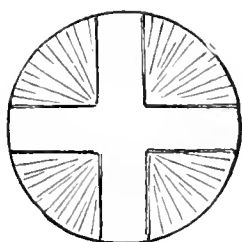
ANCIENT BEAD BRACELET OF PERU.² [The Maltese crosses represent birds.]

Mr. Mallery prefaces this explanation of the cross as the symbol of the mosquito-hawk with these remarks:

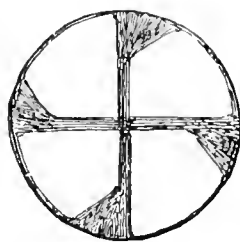
"The use of this symbol antedates the discovery of America, and is carried far back in tradition and myth. When a missionary first asked a Dakota the name of this figure, which he drew for him in the sand, wishing to use the information in his translation of Bible and Creed, the Dakota promptly replied Sus-be-ca

¹ A. R., 88-89, p. 725.

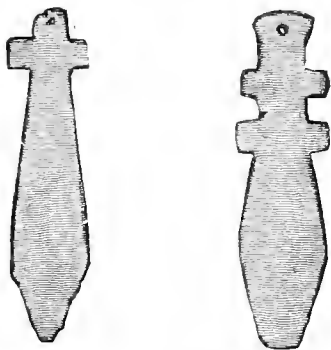
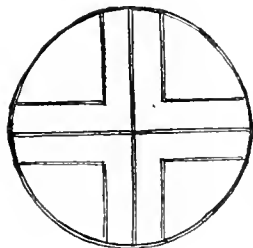
² A. R. 80-81, plate XLV, facing p. 256.



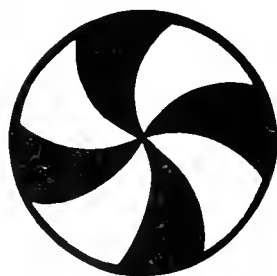
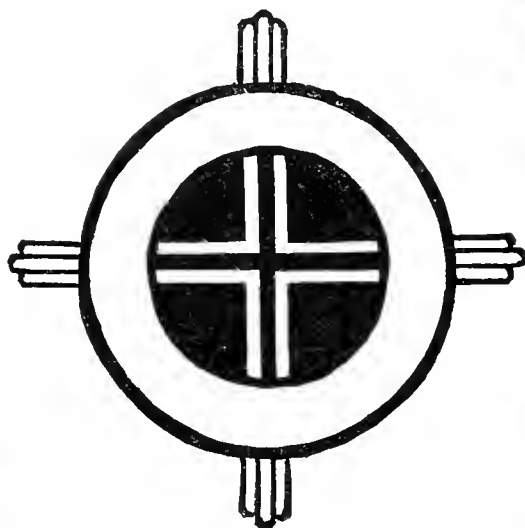
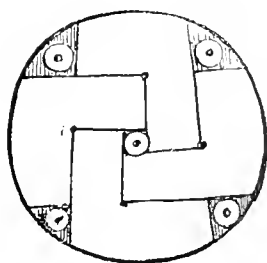
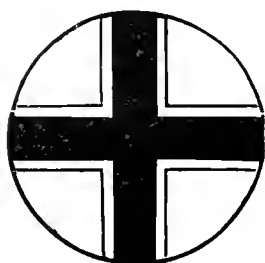
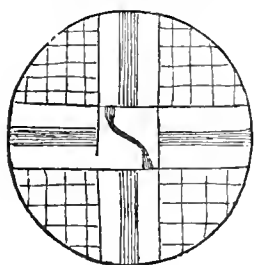
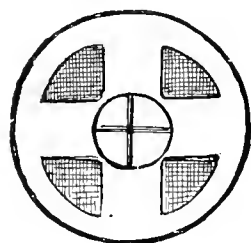
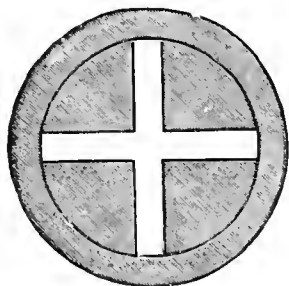
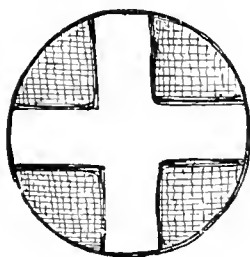
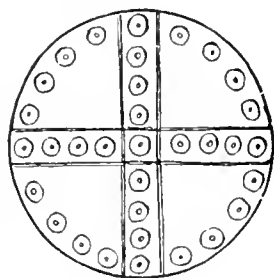
Solar Cross.



An American Swastika.



Prayer-sticks.



Symbol of the Whirlwind

CROSSES FOUND IN THE MOUNDS AND ANCIENT GRAVES IN THE DISTRICT OF THE MOUND-BUILDERS.¹

¹*A. R.*, 80-81, Plate LIII., facing p. 272. Of these crosses 8 are engraved on shell-gorgets, 1 is cut in stone, 3 are painted on pottery, and 4 are executed in copper. The last one, in the right hand corner at the bottom, is a symbol of the whirlwind (cf. *A. R.*, 88-89, p. 605).

and retraced the figure saying 'That is a Sus-be-ca.' It was therefore promptly transferred to Scripture and Creed, where it still reads 'He was nailed to the Sus-be-ca,' etc. 'God forbid that I should glory save in the Susbeca of our Lord Jesus Christ.' To the good missionary this was plain and satisfactory; for the Dakota had demonstrated by tracing it in the sand that Susbeca was the name of the figure called in English, 'cross.' But when the Dakota read his new Bible or Creed, he must have been puzzled or confused to find, 'He was nailed to a mosquito-hawk,' or, 'God forbid that I should glory save in the mosquito-hawk of our Lord Jesus Christ.' "

While it is quite true that we have no positive evidence to prove the pre-Christian workmanship of the many crosses discovered among the North American Indians, there is no good reason to doubt the indigenous and ancient character of the various cross-forms themselves in the sense in which they are still in use. For the medicine man of the Indian is very conservative, probably even more conservative than the priesthood of any other nation. Says Mr. Bourke: "Never desirous of winning proselytes to his own ideas, he [the medicine man] has held on to those ideas with a tenacity never suspected until purposely investigated."

We may say, in fine, that the cross among the Indians of North America had several meanings of a deeply mystical significance, prominent among which is the idea that it represents the four quarters of the world; yet this thought is not geographical but religious, indicating in the medicine lodge as well as in symbols and in nature at large the divine presence of a spiritual helpfulness and special protection to those who employ the proper methods of conjuration.

MISCELLANEOUS.

STATE CONFERENCES OF RELIGION.

The Churches of the State of New York have set the good example of holding state conferences of religion based upon the idea on which the Religious Parliament of Chicago was held in 1893. The signers of the call include seven heads of educational institutions of note; and leading Presbyterian, Episcopalian, and Unitarian ministers. The plan has received considerable support in the religious press of almost all denominations, and only *The Christian Advocate* condemns it as unchristian. Its editor seems to misconstrue the principle of the Religious Parliament whose aim is not to set aside dogma by a surrender of doctrine, but to bring together people of different beliefs in a spirit of good will and brotherly love. If the state conferences of religion are carried out in the spirit of the Religious Parliament, there is no danger that these meetings will demoralise and disintegrate the evangelical denominations. The call expressly states that men can "reverence each other's reverence, without closely sharing each other's doctrinal beliefs, and without disloyalty to the truth as they individually see it; and that, while differences in belief are to be frankly declared, there is truth to be learned from, as well as truth to be offered to, neighbors, and that a great deal of good, now undone in the world, waits for the hour when the churches shall join hands in a new brotherhood."

A BOON FOR STUDENTS OF LANGUAGE AND LITERATURE.

There is scarcely ground for complaint that classic German texts have not been accessible in cheap and handy editions. The handsome volumes of the *Cotta Bibliothek der Weltliteratur* at one mark (25 cents) are marvels. But the *Sammlung Götschen*,¹ some volumes of which lie before us, has certain advantages which especially commend it to those interested in the subjects included. The volumes are very tastily bound in flexible covers, and are of a size convenient for an overcoat, or even a sack coat, pocket. The publisher's price of 80 pfennigs makes it possible to deliver them in America at 25 cents, or even less in quantities.

Moreover, the *Sammlung Götschen* includes many subjects not represented in other collections. Reference was made in the March *Open Court* to the handbooks of various physical and mathematical sciences. Within the field of philology the publishers have not limited their collection to reprints of literary masterpieces but have wisely included the necessary apparatus for introduction to these works. So we have a volume of selections from Old High German literature, accompanied

¹ Address G. J. Götschen'sche Verlag, Leipsic, Germany.

by a grammar and a translation into modern German, by Professor Schauffler of the Gymnasium in Ulm. The edition of the *Nibelungenlied* gives nearly the entire epic, and contains within the same covers a brief Middle High German grammar and a vocabulary, the editorial work by Prof. Wolfgang Golther. Another volume contains, along with the bulk of Walther von der Vogelweide's lyrics, selections from other Minnesingers, and a vocabulary; this volume is edited by Prof. Otto Guntter. The volume on the *Hofepos* contains Hartmann's *Der arme Heinrich*, Wolfram's *Parzival*, and Gottfried's *Tristan*, all three condensed of course, the latter very greatly; here too a vocabulary is supplied, the work by Professor Marold, of Königsberg. Dr. Georg Ellinger edits a very desirable selection of lyrics from the sixteenth and seventeenth centuries, by named authors as well as those anonymous poems called *Volkslieder*, in which the German is so rich. The text has brief explanatory notes. Dr. O. Lyon undertakes to give a grammar of the German language in the space of 139 small pages, a condensation which inevitably necessitates the omission of much that the student would most desire. Yet the little volume may serve a useful purpose as a handbook for review. The *Deutsches Wörterbuch*, by Dr. Detter of Vienna, might prove a disappointment to those who bought it not knowing that it is merely an etymological dictionary. As such it seems to have been prepared with much care, and may serve a good turn when the "Kluge" is not handy.

It should be mentioned that the *Göschen Sammlung* includes also editions of standard eighteenth century writers. The print and paper are very good.

W. H. CARRUTH.

A HISTORY OF FRANCE.

Mr. Thomas E. Watson has certainly written an interesting work in his *Story of France*. The book begins with the earliest times and will continue the history to the Consulate of Napoleon Bonaparte. It will be published in two volumes, of which the first, which goes to the end of the reign of Louis XV, has just appeared (New York and London: The Macmillan Company. Pages, 712.) The title aptly characterises the work. It is in every sense of the word a "story," if any distinction can be made between that term and history. The narrative is extremely simple and familiar, at times intensely dramatic, and invariably tinged with a strain of irony. The author seems pre-eminently desirous of securing his effect, and to do so he appeals to sentiment as well as to reason. The characterisations of the early periods have been largely taken from the conversations of the old chronicles, and the personal element has throughout been emphasised in a much higher degree even than in Green's *History of the English People*. The characterisations of the chief personages and the surroundings are real pieces of *genre*-painting, and render many portions of the book as interesting as a novel. It is not a history of detail, but one of large outlines. It is the work of a man who has conceived his enmities and made his friends among the great characters of history, and is bent on pillorying the one and apotheosising the other. We have the author's assurance that every statement is supported by authority, and that he has consulted all the standard histories and also "those numerous memoirs and autobiographies in which the literature of France is so peculiarly rich." But of a study of the actual sources there is less intimation in the author's judgments upon events than in his narrative. It has been written not only "to note the varying forms of government, to trace the ancient origins of modern laws and customs, to mark the en-

croachments of absolutism upon popular rights," but also "to describe the long-continued struggle of the many to throw off the yoke of the few, to emphasise the corrupting influence of the union between Church and State, to illustrate once more the blighting effects of superstition, ignorance, blind obedience, unjust laws confiscation under the disguise of unequal taxes, and the systematic plunder, year by year, of the weaker classes by the stronger." With inquiry, much just indignation and naïve ethics have been mingled. The academic historian and the case-hardened political scientist will find much to censure in the form which the history of France has taken in Mr. Watson's hands; but the unsophisticated reader who wishes to acquire a vivid picture of one of the most interesting stories of modern times will find the work a fascinating one. The author has thrown his whole heart into his task, and has not minced his words in the expression of his opinions. With a due measure of criticism, the book can be enjoyed.

NATURE-STUDY AND CHILDREN'S READERS.

Frances L. Strong, of the St. Paul Teachers' Training School, has embodied her practical experience as an instructress of children in a little series of volumes entitled, *All the Year Round: A Nature Reader*. The series is published by Ginn & Co., of Boston, and is divided into three parts: Autumn, Winter, and Spring. (Price, 30 cents each.) As the method of combining all the work of the primary curriculum with the work of reading is not as widely known as it should be by primary teachers in the schools of the small towns and cities, nor by parents, it is much to be wished that books of this character should be brought to the notice of the general public. "Nature Work," as it is called, has been greatly developed in the schools of the large cities, and all who wish to acquire familiarity with its principles can satisfy their desire in these books. The system is far from being an iron-clad one, and can be adapted by every person to the requirements of his special case, and to his special experience. The plan of instruction involves the gathering of the materials for each lesson by the teacher and the pupils. The material is then studied by means of the so-called "morning talk," which deals with some natural object that accords with the season. Each child examines a specimen of the plant or animal, new words are introduced, and the affinities of the different natural objects skilfully developed. The observation lesson is followed by a drawing lesson in which the child is required to reproduce with his pencil what he sees. Work in free-hand cutting and clay-modeling is an accompaniment. A spelling lesson and the reading proper then follow. The object of the series is not so much to furnish new reading matter as to "stimulate the thought, enlarge the vocabulary, and open the eyes of the children to the wonders of the world around them." The Autumn volume begins with the study of the familiar autumn plants with which our fields abound, and concludes with reflexions on insects, spiders, and the rodents. Instructions are given as to the preparations for the Winter work, which embraces studies of lime-stone, quartz, ocean life, coal, evergreens, and bits of anthropology. This section appropriately concludes with some work on evaporation. The volume on Spring deals with like appropriate scientific topics. The lessons are conversational, and quite varied in their interest, and much good poetry from current sources has been interwoven in the text; the classical poetry, however, has been little exploited, probably from its difficulty.

A similar but more elementary volume is *Nature's By-Ways, or Natural Science for Primary Pupils*, by Nellie Walton Ford, published by The Morse

Company, New York and Boston, and with illustrations from the great artists by Gertrude Morse. The type is clear and good, and many will find it more useful than the preceding volumes as a beginner's reader.

AN EXEMPLARY COURSE IN ELEMENTARY MATHEMATICS.

Two volumes of the excellent course in elementary mathematics published under the direction of M. Darboux, the distinguished mathematician and dean of the Faculty of Sciences at Paris, have already been mentioned in *The Open Court*. They were the *Arithmetic* of Jules Tannery and the *Plane Geometry* of Jacques Hadamard. Three other important volumes have been published in the series, and are of just the type with which mathematical instructors in America should become acquainted. They are the *Algebra* and *Plane Trigonometry* of M. C. Bourlet, and the *Cosmography* of M. M. Tisserand and H. Andoyer.

M. Bourlet's *Algebra* (548 pages, price 7 fr. 50c.) is very complete for an elementary work. The treatment of negative numbers and of the commutative, associative and distributive properties of operations is quite detailed. Functions of a single variable are discussed, and the graphical representation of the variation of a function explained. Some few notions of analytical geometry have been introduced, and the theory of derivatives, usually deferred to the calculus, is touched upon. The methods employed are such as admit of subsequent extension in mathematics, and assure economy of presentation in all later developments.

The same author has written the treatise on *Plane Trigonometry* (322 pages, price 6 fr.). The book begins with an exposition of the notions of vectors, equipollency, and so forth. An appendix for special students treats of the trigonometrical representation of imaginary quantities, the formula of Moivre, the roots of imaginary quantities, binomial equations, and cubic equations.

The *Cosmography* of M. M. Tisserand and H. Andoyer (370 pages, price 6 fr.) is virtually a text-book of astronomy. The book is concisely written, and is devoted to the science of the subject as contrasted with its fictions. The most recent investigations have been recorded. There are twelve excellent plates from photographs of the heavens. The history of astronomy and some special technical points of difficulty are treated in an appendix.

Two important volumes in the same series, a *Solid Geometry* by M. Hadamard and a text-book of *Mechanics* by M. Koenigs, are announced as in the press. Inasmuch as the system of mathematical instruction in France is now more completely and rationally organised than that of any other country, the methods of these text-books are deserving of the closest attention. The publishers are Armand Colin & Co., 5 rue de Mézières, Paris.

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BOOK NOTICES.

GRUNDPRINZIPIEN FÜR LÖSUNG DER SOCIALEN FRAGE. Verfasst in drei Gesprächs-abenden von G. Krause. Published by the author. New York.

The author of this book is obviously a serious man who burns with the desire to redeem suffering mankind from the evils of the present system of social wrongs. He has passed through many sore disappointments without losing courage to carry on a propaganda for the principles and methods by which he proposes to solve the difficult problem. He submitted the MS. of his book to C. H. Boppe, editor of the *Friedenker*, to Maximilian Grossman, former principal of the Workingmen's

School of New York City, Prof. Ernst Haeckel of Jena, and Baroness Bertha von Suttner, author of *Ground Arms*; Col. M. von Egidy was also approached. All of them replied kindly but coolly, indicating that the MS. contained nothing new, and would scarcely find a publisher; some said that it was not worth publishing. The national executive of the Socialist Labor party of New York at first accepted the book for publication, but soon withdrew their promise, because they could not indorse the author's view and would only tolerate it as a private opinion. Herr Krause censures all these parties severally according to their answers, and handles them without gloves.

We must recognise that Herr Krause grows warm and eloquent when he speaks of "the true human progress that will benefit all" (p. 31), and he proposes as the sole means of progress a propaganda (*Agitationsweise*) of radical self-culture. He denounces the principle of "an eye for an eye and a tooth for a tooth" which characterises the social democratic agitation (p. 29), and demands a pure morality and a spirit of self-sacrifice. Since the realisation of this ideal is impossible under the present social system of the god Mammon, he proposes to form a new organisation for the introduction of a new system on a new basis of human solidarity. Clubs are to be founded in which each member shall contribute an assessment of about 12 per cent. of their income for the various purposes of the organisation. There shall be regular meetings of the members; popular libraries, public lectures, free discussions, physical instruments for self instruction, etc., and if possible an exclusion of all spiritous drinks. At any rate alcoholism and other vices shall not be suffered (p. 41). The main benefit to members would consist in subsidies if for some reason or other they should become destitute; but above all, every one would upon his conscience be under the obligation of a faithful self-education.

The author's intentions are good, but we fear that he will meet with disappointments only. Many of his ideals are being realised through other methods and by people who are not Socialists; but his special plan can, in our opinion, not be carried out; but supposing he would be fortunate enough to start an organisation such as he sees in his prophetic vision, he would soon find out how difficult it is to run it. Even if the assessment of 12 per cent. were not too high, the members would by no means be assured that the officers of the club would administer the common funds with integrity and honesty. The anarchical system of individual responsibility such as prevails now will probably, in spite of its many drawbacks, prove more acceptable to the masses of mankind

P. C.

WOMAN IN THE ANCIENT HEBREW CULT. By *Ismar J. Peritz*, A. M. Ph. D. (Harv.). Professor of Semitic Languages and Archæology, Syracuse University. Reprinted from *Journal of Biblical Literature* (1898, Part II.), published by the Society of Biblical Literature and Exegesis.

Woman's position in the ancient Hebrew cult has always been supposed to be inferior to that of man, a view which was used as an argument for barring the admission of women to the highest legislative council of the Methodist Episcopal Church at the General Conference. Dr. Peritz, however, after a careful investigation of the Biblical records, arrives at a result that will be unexpected in many circles, and is yet based upon good evidence. He says "that the Semites in general, and the Hebrews in particular, and the latter, especially in the earlier periods of their history, exhibit no tendency to discriminate between man and woman so far as regards participation in religious practices, but that woman participates in all the essentials of the cult, both as worshipper and official; and that only in later

time, with the progress in the development of the cult itself, a tendency appears not so much, however, to exclude woman from the cult, as rather to make man prominent in it " The essay is written in a thoroughly scholarly manner and the arguments carry conviction.

DER SCHÄDEL DES SECUNDUS ARBITER. Die Geschichte eines Seelenwanderers von F. P. Kentel. Chicago: 1898.

This neat little book of 91 pages is a psychological novel describing the weird story of an educated but erratic man who believes he has discovered the skull of one of his prior incarnations. Mr. Secundus Strobel, a gentleman of means and too much leisure, devotes his life to the odd task of disentangling the secrets of his former life, and thus the romance of his imagination is woven into the history of the disease of his mind that leads him to the asylum.

P. C.

Students of Catholic philosophy will welcome the appearance of a little metaphysical treatise on *The Notion of Time*,¹ which has been written by Désiré Nys, professor in the Catholic University of Louvain. The treatment is based on the philosophy of Saint Thomas Aquinas. The importance of the subject will be admitted by every one. In our opinion, the study of modern psychological investigations on this subject is preferable to the study of the works of Saint Thomas, great philosopher though he was. Nevertheless, the work has value as a contribution to the history of philosophy, and its author has not omitted to touch upon some of the views of recent philosophers.

The January and February issues of the elegant *Bibelot* series, "a reprint of poetry and prose for book lovers, chosen in part from scarce editions and sources not generally known," are *Gertha's Lover's*, a tale by William Morris (Part I), and *Lyrics from Paul Verlaine*, the absinthe poet of France, who died in Paris in 1896 in abject poverty. The English translations of Verlaine are by various hands,—in one case the French original is given. "Friend and foe alike," says the editor, "have vied in stripping him of every vestige of reputation; one thing only his bitterest traducer could not choose but admit,—the exquisite poetry of such verse as *Chanson d'automne*, the *Avant que tu ne t'en ailles*, and *Il pleure dans mon cœur*." Each issue of the *Bibelot* series costs 5 cents. (Thomas B Mosher, 45 Exchange street, Portland, Me)

Two attractive volumes have recently been added to the series of *Biographies of Saints* published by Victor Lecoffre, rue Bonaparte 90, Paris. One of them is devoted to *Saint Henry*, the Emperor of Germany, under whom the temporal and spiritual powers were consolidated. This little volume is written by Henry Lesêtre, who has acquired a reputation for researches in mediæval religious history. The second volume is on *Saint Dominic*, and has been written by Jean Guiraud. Saint Dominic, who was a Spaniard and lived between 1170 and 1221, was the founder of the order of Dominicans and an active participant in the crusade against the Albigenses. The volumes are cheap (75 cents, bound), and are written in French from the Roman Catholic point of view.

The Annual Report of the Smithsonian Institution for the year ending 1896 has just been published. The bulk of the contents is devoted to archæology and

¹ *La Notion de Temps d'après les principes de Saint Thomas D'Aquin*. By Désiré Nys, Professeur à l'Université catholique de Louvain. Louvain: Institut Supérieur de Philosophie, 1 rue des Flamands. 1898. Pp., 232. Price, 2 fr. 50 c.

anthropology. The first of the larger contributions is a very elaborate monograph on *Historical Art*, by Thomas Wilson, Curator of Prehistorical Archaeology in the United States National Museum. His paper "is a contribution to the history of art, rather than to the science of art, and is intended as a record of the actual manifestation of art in the various epochs of human culture in pre-historic times." The memoir covers over 300 large pages, and is very richly illustrated. The second original contribution of the volume is a long essay by Stewart Culin, of the Museum of Archaeology of the University of Pennsylvania, on *Chess and Playing Cards* being a catalogue of games and implements for divination exhibited by the National Museum at the International Exposition in Atlanta, Georgia, in 1895. There is much of strange interest in the contribution, which is also profusely illustrated. The third paper is a description of the exhibit of Biblical Antiquities at the Atlanta Exposition, by Dr. Adler and Dr. Casanowicz. The fourth is on the *Lamp of the Esquimaux*, by Dr. Hough, of the National Museum.

Dr. William Benjamin Smith, professor of mathematics in Tulane University, has published the first volume of his work on the *Infinitesimal Calculus* (Macmillan, pp. 352, \$3.25). It deals with the more elementary parts of the subject, *Real Variables*, reserving the difficult parts, and especially the general theory of functions, for a second and a third volume. The book will not appeal to the average reader of *The Open Court*, but to the student it has much to recommend itself—large print, clear and distinct figures, salient subdivisions, a common-sense arrangement, good collections of familiar exercises, and, best of all, a practical appreciation of the real needs of instruction. The language is concise, though not elegant, and with a leaning to Teutonicisms and technicalities.

The same house has also just issued a large work (336 pp.) by Prof. J. Harkness, of Bryn Mawr, and Prof. F. Morley, of Haverford, entitled *Introduction to the Theory of Analytic Functions*, which is an entirely new book and not indistinguishable with their well-known *Treatise* in any way. The theory of functions occupies a central position in modern analysis, and has innumerable points of contact with other branches. Yet there is no text-book in English giving an elementary account of its fundamental concepts. It is this need the work in question supplies to those who have already entered on the higher mathematics. (Macmillan, \$3.00). Both volumes are handsome specimens of typography.

A paper-covered edition of Dr. Paul Carus's *Buddhism and Its Christian Critics* has just been issued in the Religion of Science Library, at the reduced price of fifty cents (The Open Court Publishing Company, Chicago). The book is one which will be particularly interesting to students of comparative religion, and to Christian missionaries, to whom mainly it is addressed. There are six chapters, entitled as follows: The Origin of Buddhism, The Philosophy of Buddhism, The Psychological Problem. The Basic Concepts of Buddhism, Buddhism and Christianity, and Christian Critics of Buddhism. There are also a few illustrations.

A new revised and enlarged edition of the same author's *Ethical Problem* has also just been issued. It contains, beside the original three lectures, the entire controversy that was elicited by the work when it first appeared, together with Dr. Carus's replies to prominent thinkers holding different views on the subject. This list includes Mr. William M. Salter, lecturer of the Chicago Ethical Society, Prof. Friedrich Jodl, of the University of Vienna, Prof. H. Hoeffding, of the University of Copenhagen, Prof. L. M. Billia, of Turin, Italy, the late Dr. Robert Lewins, of

the British Army, Mr. F. M. Holland, and Mr. John Maddock. The most important questions of ethics, such as the nature of conscience, the distinction between moral law and moral rules, the ultimate basis of morality, the relation of pleasure and pain to moral motives, and so forth, are fully discussed in the work. The bulk of the volume has been considerably swollen, and contains now 351 pages (The Open Court Publishing Company, Chicago. Cloth, \$1.25).

Dr. Douglas Houghton Campbell, professor of botany in the Leland Stanford University, of California, has collected the course of lectures which he delivered last year into a volume entitled: *The Evolution of Plants* (New York: The Macmillan Company. Pages, 319. Price, \$1.25). The lectures aim to present in an untechnical manner the most striking facts bearing upon the evolution of plant forms. So far as the author's knowledge reaches, no popular work, not addressed to botanical students alone, and giving a connected account of the development of the plant kingdom from an evolutionary standpoint, exists in the English language. And this deficiency in our scientific literature it was that moved him to publish the present work. He claims no originality for the matter presented, beyond its arrangement, and has availed himself freely of the material accumulated by botanists during the past fifty years. Sixty drawings have been prepared for the elucidation of the text.

NOTES.

Dr. W. L. Hailmann, the late superintendent of Indian schools (under Cleveland), writes concerning the article on the "Indian Question," written by Mr. A. H. Heinemann for the December *Open Court*, that "it is the most instructive, true to the core, and will do much to clear the atmosphere," adding, "I do not, however, think it quite severe enough on the political corruption which poisons every phase of the work," and "on the lack of conscience displayed" on "the part of secretaries of the interior, senators, representatives, and local party bosses. But all the statements made by Mr. Heinemann are good and true and thorough."

We learned with deep regret of the death, some months ago, of Hermann Boppe, the editor of the *Freidenker*, of Milwaukee, Wis. He was an honest man and stood up bravely for his convictions. As an iconoclast he had not his equal; but his language was moderate, and he never pandered to sensationalism. He condemned religion in any form and preferred the discarding of traditional ideas to the method of purifying them, as pursued by *The Open Court*. His political radicalism found its ideal in the institutions of Switzerland, and he advocated reforms such as the abolition of the presidency, etc. His field of work was limited to the Germans, especially the liberal element, which is represented by the *Turnverein*. Among the Turners he had his friends, although even here he frequently met with resistance, for he never tried to be popular and would have held to his views even though he had wrecked the *Freidenker* and all his literary enterprises. The cause of his death was overwork, for he was indefatigable, and the means at his disposal were not sufficient to engage effective editorial assistance. His best helpmate was his wife, a German-American lady, a native of Milwaukee, of scholarly education and high accomplishments.

We differed from Mr. Boppe's views on many points, and were repeatedly engaged in controversies, but they never disturbed our personal relations, which remained friendly to the very last.

P. C.

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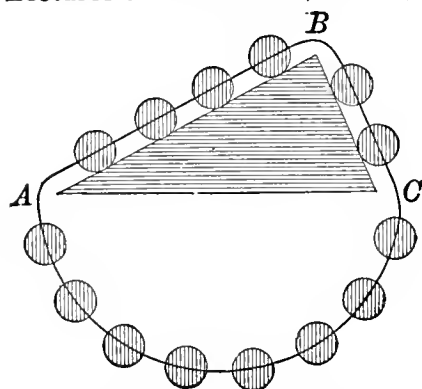
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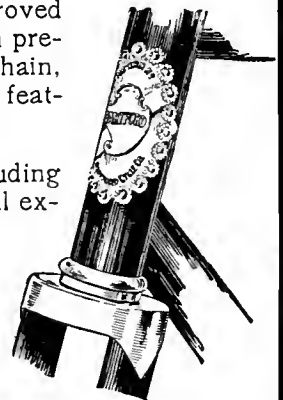
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