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THE

LONDON QUARTERLY REVIEW.

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- ART. I.—1. Theism: being the Baird Lecture for 1876. By R. FLINT, D.D., LL.D., Professor of Divinity in the University of Edinburgh. Blackwood. 1878.
 - 2. Antitheistic Theories: being the Baird Lecture for 1877. By R. Flint, D.D., LL.D., Professor of Divinity in the University of Edinburgh. Blackwood. 1879.
 - Final Causes. By Paul Janet. (Translated by W. Affleck, B.D.)
 T. and T. Clark. 1878.
 - The Basis of Faith: a Critical Survey of the Grounds of Christian Theism. By Rev. E. R. CONDER, M.A. Hodder and Stoughton. 1877.
 - 5. The Necessary Existence of God. By W. GILLESPIE. Black: Edinburgh.
 - 6. Essays. By Joseph Hume. Edinburgh. 1804.
 - 7. Modern Athèism: the Fernley Lecture for 1877. By the Rev. E. E. Jenkins, M.A.

Ir will always be a ready objection of Atheism to the doctrine of the Divine Existence, that God can never be brought within the range of sensible observation. However superficial, such reasoning is always convenient, and has its force. And something can always be made of the strangeness of the fact that, upon such a subject, we are left to ask questions, and even to wander in doubt and uncertainty. The truth of Deity, one would have imagined, would have been plain to all, and beyond the contradiction of any. But nothing is indisputable among men, except that which is self-evident to sense or reason; and the existence of God is not directly known to either. We may

sigh for a visible or palpable demonstration of God, but, from the nature of the case, this is impossible. He can never be numbered among the phenomena upon which common sight can look. If He has revealed His thoughts to us in creation and in Christ, still He remains for ever in light which neither sense nor mere reason can ever

approach.

It is at this point that the most awful risk of speculation arises. Is man capable of knowing, in any legitimate sense of knowing, anything beyond that which the sense reveals? Is that which the reason infers from the experience of sensation true or false? From that which is known may we conclude the existence of other things and truths which are themselves not found within the sphere of the sensible? May such things, under any circumstances, ever be made known to man? That modern and popular form of the materialistic philosophy which is called Agnosticism, derives all its plausibility from the supposition that man has no knowledge which is not derived and attested by phenomena. It denies that we have any right to assume that anything exists which has any difference of nature from that which the sense apprehends. And since God is not "a phenomenon" it is asserted that we can predicate nothing concerning Him.

Fortunately, this limitation of the nature and sources of human knowledge has no very great authority, and is not yet universally allowed. Something intellectual or spiritual is still supposed to belong to the thinking subject. Therefore, it might be shown at once, and perhaps on these very principles of Agnosticism, that something can be said for the religious theory. For, that "sensation" which reveals matter, and of which, according to Mr. Mill, matter is but "the permanent condition," does not wholly belong to the material. It certainly has not been proved yet that the only subject of sensation is cellular tissue. And if there is something in man himself, in sensation, and reason, and will, which is essentially different from the material universe to which he is attached, how can it be asserted that "the phenomenal is all we can know?"

Of the peril of this insidious and spreading type of infidelity, however, our apprehensions cannot be too anxious. We shall not regret that Professor Flint has not included a dissertation on Agnosticism among his lectures on antitheistic theories, if, at some early future, he present

to his readers an examination of that system of opinion, as candid and searching as he has given of the older forms of Pantheism and Materialism. The Pantheist has some twilight of heaven in his dream to cheer his soul with a faint vision of spiritual realities. The Fatalist, even, while he reckons all lives and all things to be in the hand of the Supreme Will, yet bows before the inevitable counsel which he can neither comprehend nor resist. But Agnosticism ignores God and tramples upon faith. It despises religion as the most deceitful and damaging of superstitions. It has no patience for the gospel which diverts the thought and energy of man from his duty and interest in this life to the pursuit of promised blessings elsewhere. It can, therefore, never be neutral or indifferent in regard to religion; its mission is militant, and nothing less than the abolition of creeds and worship can satisfy its aspirations. Already it has concluded theology to be only an advanced fetishism, and its standard of wisdom places all degrees of faith below zero. The practical effect of such a philosophy upon the personal and social life of the increasing multitude who in Europe and elsewhere are inclining to it, will, doubtless, be vast and profound. We perhaps need not fear that its progress will be very long continued. Scepticism seldom prevails over large portions of the human race for any great season. The mystical instincts of the human soul, the calamities of human life, and, as we think, the Word and Spirit of God, will not long allow a man to forget that he is spiritual and immortal. Even Mr. Mill has said: "So long as human life is insufficient to satisfy human aspirations, so long there will be a craving for higher things, which finds its most obvious satisfaction in religion. So long as human life is full of sufferings, so long there will be need of consolation which the hope of heaven affords to the selfish, the love of God to the tender and grateful." •

Meanwhile, a theory which denies the claims and sanctions of a higher world, will find too glad a reception in many breasts; the tendencies of an ever-extending physical science may help to encourage it; while the grotesque narrowness of some who profess to represent religion will, as heretofore, enhance the charms of bara

unbelief.

^{*} Three Eccays on Religion, p. 104.

But as God is not an object of sense, neither is the notion of His existence a universal intuition. There are fundamental principles or tendencies, or limitations of thought in the human mind, which give to thought its invariable forms. It is by one of these that man detects his separate consciousness (cogito, ergo sum), and also perceives the distinctness of other objects from himself (the non ego from the ego). In the same way he cannot but relate all things to space and time; nor can he doubt the association of cause and effect. But it is not proved, in like manner, that he has a natural and necessary intuition of a personal God. That he has a capacity for the idea of God, and also powerful. almost irresistible tendencies to religion, no one will deny. All this is too well demonstrated by history. But this is not what is meant by an intuition. By an intuitional principle we mean a faculty or law of the mind which makes it necessary for it to think in a certain way, if it think at all. But, as M. Paul Janet says in his profound work on Final Causes, there is no mental principle of finality like that of causality. When we see the tide filling the harbour and covering the shore, we naturally allow that the movement has its material antecedents, but we do not as naturally regard it as the work of God. Since. therefore. the idea of a personal Divine Originator is not in us, we may look upon the universal diffusion of religion among men as something approaching to a miracle. But it is left open to each man, if he so think or will, to declare a doubt of the Divine Existence. We have, therefore, no reason to deny the sincerity of some who profess and call themselves Atheists.

"True, the existence and possibility of Atheism have often been denied; but the testimony of history to the reality of Atheism cannot be set aside. Although many have been called Atheists unjustly and calumniously, and although a few who have professed themselves to be Atheists may have really professed a religious belief which they overlooked or were average to acknowledge, we cannot reasonably refuse to take at their own word the majority of those who have inculcated a naked and undisguised Atheism, and claimed and gloried in the name of Atheist. Incredible as it may seem that any intelligent being, conscious of human wants and weaknesses, should be able to look upon the wonders of the heavens and the earth, of the soul within him and of society around him, and yet say there is no God, men have done so, and we have no alternative but to accept the fact as we find it."—

Flint's Theism, p. 78.

The doctrine of the Divine Existence must then rest upon what Professor Flint calls "the Theistic inference." In an inquiry into the nature, grounds, and results of the mental process which is described by these terms, we are

led to ask, What is Theism?

"Deism," strictly speaking, has exactly the same signification, only that it has for its base the Latin word for God, while "Theism" embodies the Greek word of the same meaning. But there is a convenient distinction between the two words which is now generally accepted. "Theism is the doctrine that the universe owes its existence and continuance to the reason and will of a self-existent Being, who is infinitely powerful, wise, and good. It is the doctrine that nature has a Creator and Preserver, the nations a Governor, men a heavenly Father and Judge." Deism, however, though it may allow that there is something divine in nature, or which we may regard as the Great First Cause, does not allow that we know anything of the character or will of God. It refuses to accept any supposed manifestation or revelation of God as either possible or credible. It therefore may include the Pantheism of Spinoza, who regarded the universe as the infinitely varied form of the one substance; and that of Hegel, who regarded God as the latent soul of the universe, only reaching consciousness in man; as well as many other theories which exclude any recognition of the personality of God. But Theism admits the possibility and even the probability of a revelation; for, since it declares God to be infinite in goodness as well as in power and wisdom, it implies that He is able and willing to confer upon His intelligent creation the blessedness of fellowship with Him.

The Atheist, of course, disputes the validity of any such assertions respecting God. He may content himself with assaulting the ordinary arguments of the Theist, and with an attempt to show that the reasoning usually employed for the demonstration of the existence of a Supreme Being is not sufficient for that purpose. Doubtless a large proportion of those who have been called Atheists have been and are of this class. They do not deny the possibility of a true theory of Deity, but they impugn the theories which so far have been devised. Another class, however, go beyond this, and endeavour to show on philosophic grounds

^{*} Theirn, p. 18.

that it is impossible for man to know God, or to fusnish indisputable evidence of His existence. Thus, Hume argued that since human knowledge was wholly derived from experience, and experience came through the senses, man could never know that which lay beyond the world of sense. The Positivist and the Agnostic alike shelter behind this position. But then there is a third and more extreme class of Atheists, who are bold deniers of the doctrines of Theism, and who dogmatically teach that there is no God.

Now, we have already conceded the claim of some atheistic doubters to be considered sincere. That inherent weakness which affects all human theories and statements of truth has been, from some cause or another, so vividly apparent to them, that they have been led to doubt that which most people believe. They may have been caught in the sophistical web of a philosophy which defies all the struggles of reason to escape. But while we admit that sceptical Atheism may claim respectful consideration and argument, we must deny that Atheism can ever have the right to be dogmatic. For, if religion is objected to because its foundations are supposed to be uncertain, the theory which opposes it ought to have at least a superior certainty. if not absolute undeniableness. But here is the utter failure of Atheism. No one can prove that there is no God and no hereafter. At best, Atheism is but a speculation, and may, some day, prove to be awfully untrue. The strength of the Atheist lies in the logic by which he can attack the reasoning of the theologian, and in the rhetoric by which he can portray the mysteries and miseries of human life, or manipulate them as witnesses against the wisdom and grace of Providence. But when he attempts to comprise the universe of matter and mind, of being and history, within the lines of his rigid theory, he soon becomes contemptible. His guerilla warfare always has pursued, and always may harass the armies of faith; but he has neither numbers nor armament by which he can withstand the energy of human belief, or occupy the ground which the Church has held from time immemorial. Before he can become the dogmatic teacher and guide of men, he must not only show that the common theistic arguments are weak or false; he must show that his own position is unassailable. He must, in fact, prove that there is no God. But, for this, he must possess an infinite knowledge. He must search every world and cross-examine every intelligent being; and, in fact, command the resources of that omniscience and omnipotence which he denies.

Atheism, therefore, leads its followers into no certainty. This, doubtless, is its promise, and possibly its principal attraction to some minds. It is hoped that in universal denial freedom for the soul will be realised. But there is no such emancipation from the trammels of doubt and uncertainty for us. Post equitem sedet atra cura. While professing to be a science, it is but a creed, and we know no other creed which requires so much faith. It would withdraw at once the ideals, the aspirations and consolations of religion, without replacing the noblest of them; it contradicts and denounces the meditations and utterances of the wisest of all ages without supplying any better philosophy; it leaves nature unexplained, human life uninterpreted, and the soul of man without a superior in nature. or an inferior in destiny. Under its guidance the hapless human being would soon learn that the first law of his intellect must not be applied to the universe. Of each finite object he may confidently say that it is an effect of a preceding cause; but of the cosmos, or aggregate of effects, he must make no such assertion. Having entered upon the path of knowledge, which increases in brightness for a season, he finds that its end is illusion and darkness. Nothing is true except that there is no truth. Man may entertain himself with schemes of philosophy, with visions of poetry, or with suggestions upon which art has stumbled, but all these ideals of intellect are but flickering shadows, and not even the shadows of reality. Finally, like the ancient Israelite, conducted through a wilderness of peril and barrenness, he may ascend to some Nebo vision, wherein he may survey the future inheritance of humanity: but in it he can have no share, for his conscious spirit is about to pass into that profound sepulchre which no angel of resurrection can ever find.

On that part of its ground which Theism holds with Deism and Pantheism it has not, however, been much opposed. The opinion that there is something permanent, fundamental, and sternal in the universe has never excited much hostility. There has been a wonderfully good feeling between all classes of unbelievers. They borrow each other's arguments and methods, and usually speak of one

another with much admiration and even with veneration. But the peculiarity of Theism is that it claims homage for a Divine Intelligence, and submission to a Divine Will. And this is that to which men principally object. But the same reasoning which brings to the truth that there is something Divine in Nature brings us also to see that the Deity is also personal and intelligent. We may not be able to show how the two conclusions harmonise in reason. We cannot tell how the Infinite God has any relation to the finite, or how the eternal holds any relation to the temporal. We cannot show how the mind to which the past and the future are present can be concentrated with an infinite variety of aspect and energy upon the moment that is now passing through the all-but-infinite universe. But the laws of evidence do not require us to explain a thing philosophically before we can attest its existence: we must first indeed be sure that it exists before we can explain it. As Professor Flint frequently says. "Unity is the goal, and not the starting-point of the human mind." Yet it is an illusion for any to imagine that this goal has ever been reached. Bruno, Spinoza, Hegel, and Schelling in modern times, and philosopher after philosopher in former times, have attempted to construct a harmony of the truths known to man, but have all equally failed. The One and the Many, the Necessary and the Free, the Absolute and the Relative, are terms which have never been identified by any method of Reason.

Both Idealism and Materialism appeal to the passionate desire of the human mind for unity. The former traces everything to one fone et origo, i.e., thought. Materialism assumes that matter is the only reality. Pantheism also meets the same intellectual craving by referring all things to the Divine substratum, without violating the claims of the religious nature by the utter denial of God. In his Antitheistic Theories. Professor Flint reviews the history of Pantheism as it is found in the Oriental systems—Brahminism and Buddhism-and in the Greek systems-particularly that of the Eleatic school, where, under Parmenides, it was brought to perfection. Next comes the examination of Gnostic and Neo-Platonic forms of the theory, and of the more modern developments by Bruno, Spinoza, and others. Jordano Bruno was "the brilliant inaugurator of modern Pantheism." A profound, learned, and witty writer, he was the forerunner and instructor of Spinoza:

and, notwithstanding his sceptical opinions, deserved a better fate than to perish under the murderous grasp of the Inquisition. Within a century after the tragic death of this martyr to philosophy his best thoughts had been formulated by Spinoza into propositions, axioms, and definitions, by which he expected to comprise God and the universe in one circle of ideas. These axioms, however, are full of uncertainity: the propositions contain much that no one can demonstrate; and the definitions, as Professor Flint remarks, contain mysteries more difficult than any which the creeds of the Church hold with regard to the Trinity or the Incarnation. His system is built entirely upon the d priori method: for, starting with the postulate of the necessary existence of God, he proceeds to pile up his pyramid of necessary consequences, among which is the impersonal nature of Deity, and the denial of freedom to Such a theory is evidently unscientific and absurd. It is unscientific; for it denies the plainest fact of human consciousness, which is found in the sense of individual will. and also contradicts the teachings of the moral sense by abolishing the distinction between right and wrong. is absurd; for it represents God as the victim of His own laws, as an Intelligence without will, an Infinite Being subject to a mechanical fate.

Theism, on the contrary, is content to rest its argument for the Divine Existence on à posteriori grounds. In such a case as this there can be no a priori reasoning. This is for the simple reason that there can be nothing antecedent to the Being of God. Not even Archimedes could lift the world without a fulcrum for his lever; nor can any prove that God must be from any principle that is higher than Himself. Dr. S. Clarke thought that he had found an à priori principle im Necessity; but he had to base all his reasoning upon the admitted existence of the present world: something is, therefore something was. Anselm argued that the necessary reality of God may be inferred from the idea of Him, and that except it were so there would be something higher in idea than in actual existence; we do not see how any one can dispute his reasoning. But this is not d priori argument: it commences with an idea present to the human mind, and thence reasons upward to God. So, when Descartes insists that the finite mind could not originate the conception of the infinite, but that an infinite must exist to

account for man's idea of it, he is only ussuning that every effect must have a cause. That very acute but not very obsequious reasoner, W. Gillespie, in his book on the Necessary Existence of God, most strennously condemns the ratiocination of Dr. S. Clarke, Lowman, and Locke, who professed, each in his turn, to have "demonstrated" the Being of God on a priori grounds. Yet he falls into the very same error. He begins with Infinite Extension, which, he says, involves Necessary Existence. And we do not think that any one would dispute this point with him. But whence does be derive his notion of Infinite Extension? Is it not from our present perception of the fact of space, in which all things have their place? And from the space we apprehend in relation to the things about us we reason upward to boundless space, or extension—which indeed is none other than Omnipresence, or, in other words, God. It is evident, therefore, that a priori reasoning can have no place in the proof of the Existence of God: it comes in, when once this point has been reached by & posteriori argument to show how all kinds of perfection must necessarily belong to Him who has thus been shown to exist. There is, however, much originality and force in Mr. Gillespie's book, and we are surprised that Professor Flint should not refer to this work of one of his own countryman.

All that Theism assumes at the beginning then is that something exists. It can allow that all human knowledge is derived from the senses and the mind. Through the senses we receive impressions from the outer world; and from the mind, i.e., the subject of these impressions, we receive intuitional impulses to thought which enable us to attend to, to remember, and to reason upon the facts of experience. Therefore, whatever evidences there are of the Divine Existence, they must exist within the wide domain of human observation and reflection. And these evidences are countless.

"The proofs of God's existence must be, in fact, simply His own manifestations; the ways in which His makes Himself known; the phenomena on which His character and power are imprinted. They are to be found in all the forces, laws, and arrangements of nature; in every material object, every organism, every intellest and heart. At the same time they consur and coalesce into a single, all-comprehensive argument, which is just the sum of the indications of God given by the physical universe, the minds of

men, and human history. Nothing short of that is the full proof."

—Theism, p. 62.

The first appeal of Theism is to the world around and within us. We need not debate for a moment the question of the reality of the Universe. In whatever sense we speak of things as existing, in the same sense we conolude that God exists. We may, therefore, at this point, leave Realist and Idealist to carry on their warfare for some time yet. The decision of this particular controversy would not affect the argument. It is assumed that existence is real, and that for everything that exists there must be a cause, either in itself or in some other thing. We may be said to derive this idea of Causation from our own experience of volition and action; but it is not wholly so, since there is a subtle and mysterious psychological affinity between the will in man and his idea (as it is called) of cause and effect. We are conscious of the power of the will over the body, and even over the states of the mind. What force or power is, in itself, we do not know. All that we can know of the cause, perhaps, is that it is the invariable antecedent of the effect, but this is all which the argument requires. Hume was thought to have wounded the root of this ancient and powerful argument for the doctrine of Deity when he denied our knowledge of the nature of the active power by which the effect is produced. But he only showed that Force and its phases had not been gauged by human analysis. His reasoning could not disturb the persuasion that effects are dependent upon their causes. But the only sufficient and worthy Cause to which Nature can be attributed is God. For, although the Universe which we know is finite, and we cannot, in strict reason, infer the infinite from the finite, yet it requires but another step of reason to bring us to the Theistic position. And in this second step we are but reasoning on the principle of causality. That is, the Cause, of which the Universe is but an effect, since it is not included in the universe of results, must be Cause to itself; that is, is selfexistent.

Pantheism admits the force of the à posteriori reasoning, and asserts with Theism, that only God can account for the system of Nature. It even insists that He is ever immanent in the system producing all forms of matter and life, and evolving all the wonders of space and time. But Materialism, on the contrary, asserts that Matter alone is

eternal and self-existent. It only allows one category of existence; and that is the one which sense perceives, and which tabulates its laws in science. Mr. J. S. Mill defends the supremacy of matter and its laws by asserting that though the forms of matter may change, it has a permanent element which ever abides. What this "permanent element" may be he does not particularly define. How great an inconsistency this is in Mr. Mill's theory of things, not even his astute mind ever seemed to detect. For, like Hume, he denied that we knew anything of matter except its properties. Advancing to the farthest limits of scepticism he only allowed matter to be "a permanent possibility of sensation." Yet here he assumes that matter has something real in itself, which is not dependent upon its forms, nor indeed upon our minds, which can only trace it in the forms! We think that this "permanent element" in matter is that which of all things we cannot find. The so-called elementary substances may some day be decomposed, and already they are found to be subject to ordinary laws in combination with each other. Besides, if they are permanent, we must next ask why they exist, and no others; and how they acquired solidarity so as to found a universe.

We have no objection to the Atomic theory, although it requires faith. It is a convenient and not irrational hypothesis. But the existence of atoms and molecules, and their rigid rules of combination, require explanation as much as their most complex development. The atoms may be centres of force, or life; but how did they come to be such? On such a subject no one could speak with more authority than the late lamented Clerk Maxwell, who says:

"None of the processes of Nature, since the time when Nature began, have produced the alightest difference in the properties of any molecule. We are unable, therefore, to ascribe either the existence of the molecules or the identity of their properties to the operation of any of the causes which we call natural. On the other hand, the exact quality of each molecule to all others of the same kind gives it, as Sir John Herschell has well said, the essential character of a manufactured article, and precludes the idea of its being eternal and self-existent. In tracing back the history of matter, Science is arrested when she assures herself, on the one hand, that the molecule has been made, and on the other that it has not been made by any of the processes we call natural."

—Presidential Address to British Association, 1870.

There is, in fact, so much found in connection with matter and its laws which the material can never explain, that they who speak of the Universe as self-originated necessarily attribute to it a quasi-intelligence, or divinity.

"It is a universal characteristic of Materialism that it supposes matter to be more than it is known to be; that it imaginatively exalts and glorifies matter beyond what sense or science warrants. It always attributes to matter eternity and self-existence; sometimes it supposes it to be likewise essentially active; sometimes it endows it with life, with sensation, with volition, with intelligence. Systems which agree in verbally representing matter as the foundation and explanation of the universe, differ enormously as to what matter is, but they all, without exception, ascribe to matter properties of which experience teaches us nothing."—Anti-theistic Theories, p. 42.

But Materialism is not the creation of modern science. It is as old as Lucretius, Epicurus, Democritus. outlines of this plausible speculation were laid down very clearly by these ancient speculators, and they have not been much extended by Holbach or Tyndall. It would gratify the craving of the human mind for unity if it could be shown that matter is all that the Universe contains: if no supernatural authority overshadowed the Universe. But, as Professor Flint remarks, even Matter is not One: it is multitudinism. It consists of an innumerable series of independent forces and causes, which, if there be no God, are without government and without harmony. The elementary substances cannot be proved to be identical, and therefore might be eternally different! Moreover, if evolution is the law of both organic and inorganic existence, we should then have before us this most stupendous phenomenon: viz., that the lower continually produced the higher without any cause or reason for doing so. Think for a moment that such powers are in Nature as "Natural Selection" and the "Survival of the Fittest:" and that everything, everywhere, tends to surpass itself, and to produce something nobler than itself! This would be no mean wonder, that there should be an inspiration diffused through every atom and every organism and every world, compelling the lower to seek the higher: but that which we are asked to believe is that Nature of herself actually does it. That is, the inorganic produces the organic, the simple is author of the complex; atoms without sensation are the parents of that which has sensation and mind;

and, in fact, everything comes from nothing! And the first law of nature is ex nihilo, omnia funt!

Materialism, therefore, cannot be looked upon as a rational theory. It gives no help to the mind endeavouring to explain to itself the nature and origin of things. It gives no account of the order, laws, harmony and progress of the Universe. It has not yet found its way to the fountains of life, and has made no bridge over the unfathomable abyss between the conscious and the unconscious. It has no interpretation to give us of the moral qualities of human nature, and of religion-which, according to it, indeed, must be the vainest of the vanities which But these things, which man has made for himself. Materialism finds it impossible to explain, and even declares to be inexplicable, are the ready witnesses by which the case of Theism is made good. The unity of worlds and atoms, however distant or alien from each other, in what is called the "Universe;" the manifest tendency in all the life and work of Nature to produce determinate results: and the thought, the history, and the worship of man, alike bear their testimony to the exceeding probability that there could not be so many signs of intelligence in Nature, unless there was an Intelligence superior to and antecedent to it.

But this is to anticipate that which we must now say. All that we have so far proved is that from that which is. we infer that something always was; and that something must be self-existent. But still, this aboriginal ground of Nature may be the eternal succession of events, as some say; it does not yet appear that it is a Divine and Fatherly Intelligence. But let us turn again to the facts recrest to us, and we find them impressed by specific laws, and absolute order. Atoms cannot make molecules except in fixed proportions and under suitable conditions. The planets move in orbits prescribed by geometrical laws. Life, in plants and animals, is an equilibrium kept up by an unknown agent between opposing forces of matter. seasons, the generations, the tides; the rising and setting of suns and stars; the colours of the sky and the flowers; the wild fork of the lightning and the steady roll of the river to the sea, all proclaim the subjection of Nature to fixed and unalterable rule. Whence came this order? Could that which is itself subject to these laws and ordinances be itself their author? This is manifestly absurd.

Therefore, as every effect must have a cause equal to itself, the laws of Nature prove that an Intelligent Lawgiver exists, who made the earth and sky and sea.

One effect of the increased ability, granted to man in these later times, to interpret Nature by secondary laws, is that the supernatural seems further from him than before. In the simpler stages of human progress all that was extraordinary was ascribed to supernatural agency. The lightning and the thunder, the earthquake and the plague, were reckoned to be immediately from God. Now, these are explained by natural causes. Even the complex and composite Universe as we know it, which once was thought to have come, just as it is, from the hands of the Maker. is being examined in order to trace the process of change through which it has passed, during unmeasured ages, from the simplest conditions of matter to its present form. That supernatural agency which our unsophisticated ancestors saw at work in the midst of the natural world in their own days, and to which each world and atom was attributed, is therefore being put back beyond the sphere of the natural world. Some even question, as we have seen, whether Nature needed a Creator any more than she now needs a Ruler and Sustainer. It therefore appears that an increased knowledge of Nature and her laws does not of necessity bring us to Nature's God. The Divine Beality scems to retire as we advance. Nature becomes, to the investigator, not a ladder by which he can climb to heaven, but a vast scale by which he discovers the infinite distance between the Eternal Power and man, whose breath is in his nostrils. It reveals our littleness as much as His greatness. But even this teaching is overlooked: and it is thought that because some old signs of the supernatural have been superseded, all will, in turn, become The first effect, therefore, of the Darwinian doctrine has been to encourage scepticism, though we have no doubt that "further knowledge will bring men round to faith again." Evolution, if proved, can be but a wonderful working of God, scarcely less prodigious than creation itself. As it has often been shown, natural selection, and other supposed laws of development indicate intelligent purpose underlying all nature, an ever wakeful omniscience and power directing every part of the universe to the highest possible results. These doctrines, when shown to be substantial, will furnish the Paley of the

future with the most novel and convincing testimonies to the existence and operation of the Infinite Mind.

There is no theory but the Theistic which can account for the manifest order of creation. If it be said that order is inherent in Nature itself; then we want to know how and why it is so. But it is suggested that the present steadfast and safe procedure of Nature is a result of a happy accident in the evolution of an unlimited career of possibilities through boundless time. "Throw the letters of the Greek alphabet together from eternity, and you would get out the Iliad: let atoms circulate for ever, and you must educe the present universe." But in this case you suppose that the letters of the alphabet are in existence, and ready to be thrown; the atoms, with their affinities and laws, are prepared to commence their sempiternal dance. questions still arise, whence came they, and why do they exist as they are? But the Materialist has no answer to such questions, and the Agnostic superciliously smiles at the simplicity of those who ask them.

But if there is order in Nature, that order must have a purpose for which it is instituted. He who has originated matter, life, and motion, but subjected them to laws which the human intelligence finds to be constant and adapted to their purpose, must Himself be Intelligent in a supreme degree. But there is a very sophistical objection against the argument from design, which even Mr. J. S. Mill was not ashamed to employ. It is that contrivance implies weakness rather than omnipotence. He who has recourse to contrivance in order to accomplish his end, acknowledges that there are difficulties which it requires ingenuity to surmount. Whereas, an Omnipotent Being knows no difficulties, and needs no art to assist His operations. Professor Flint's reply to this objection is worthy of being recorded.

"This, it seems to me, is very strange and worthless reasoning. According to it, the ability of God to form and execute a purpose is evidence not of power but of weakness. I wonder if Mr. Mill imagined that the inability of God to form and carry out a purpose would have been evidence not of His weakness but of His power. Or did he suppose, perhaps, that both ability and inability were signs of weakness, and that, consequently, for once opposites were identical? Or did he not think on the subject at all, and so reasoned very much at random? I confess I cannot see how ability to contrive things is weakness, or inability to contrive them

power. I hold to Bacon's maxim that 'Knowledge is power,' and refuse to admit that wisdom is weakness. But God, if omnipotent, it is said, did not need to contrive; His mere word must have been sufficient. Yes, is the obvious answer; His mere word, His mere will, was sufficient to produce all His contrivances. and has produced them all. There is no shadow of reason for suspecting that anything was difficult to Him or for Him. At the same time, if He desire certain ends, His will cannot remain mere will and dispense with the contrivance of appropriate means. If He wish to bestow happiness on human beings. He must create human beings, and contrive their bodies and their minds. It is only in the world imagined by Mr. Mill-one in which two and two might be five-that a sunbeam could serve the same purpose as a granite pillar or a steam engine, and such a world, most people will assuredly hold, even Omnipotence could not create. Infinite power and wisdom must necessarily work under limitations when they originate and control finite things: but the limitations are not in the infinite power and wisdom themselves they are in their operations and effects. According to Mr. Mill's argument, infinite power could not create a finite world at all; only a finite power could do so. That surely means that a finite power must be mightier than an infinite power; and that again, is surely a plain self-contradiction, a manifest absurdity."—Theism, pp. 177-9.

Yet the argument from Final Causes has often been loosely employed, and a work like that by M. Janet was greatly needed. He surveys the whole subject, candidly renounces positions which ought never to be taken, and carefully defines the impregnable ground of the Theistic argument in this department of inquiry. Anthropomorphic conceptions continually intrude into this sublime domain of superhuman things, and Divine wisdom has often been caricatured under comparison with creaturely contrivance and human device. But there is an immeasurable distance between them. When a human inventor constructs a machine, it is usually with a definite aim. He has one object to reach, and provided his invention accomplish that, he concludes that he has been He may perhaps foresee that other results will also follow if his main object be attained, but he is not including these in his direct aim: they are accidental to his principal purpose. For instance, the first constructors of an iron tramway, and of the locomotive engine, only wished to improve the modes of travelling and transit. They perhaps foresaw that their success would be followed

by a rise in the value of property along their track, by the enlargement of towns, and by a general development of commerce. But their machines had only one end; and that was to attain a more rapid locomotion. numerable secondary and ultimate consequences, material commercial, and social, were only dimly foreseen, and the greater part of them never anticipated. Now, it is only in the humblest fashion of analogy that this adaptation of means to ends by man can be illustrative of the working of the Infinite Creator. To Him there are no accidents; everything is foreseen. He not only secures the primary object for which each thing exists, but includes in His cognition of it, all secondary results and combinations in which it can ever take part. Here we encounter once more that logical barrier which for ever obstructs man's search after unity. We ask. How can there be first, or second, in the mind of the Eternal? Can we ever attribute to Him a distinct and separate purpose such as influences the effort of man? And there is that further difficulty, which is as ancient as the other, namely: If God foresaw all results, and included them in His reasons for action, why did He not prevent the occurrence of evil?

Notwithstanding these intellectual and moral difficulties, however, we have no doubt that men will continue to say that the wing of the bird was meant for flying, and the eye of the animal was meant for seeing. It will never be considered to be a full statement of the philosophy of the case, to say that birds fly because they have wings, and that animals see because they have eyes. It will always he considered absurd to say that my neighbour can tell the time because he has a clock, but to deny that some one has made the clock or he never could have had it to tell the time by. As M. Janet points out, every event refers to the past and to the future. Sometimes it most naturally suggests the past, as, when we see the wreck of a ship strewing the shores, we think of the tempest that has gone by, and of the life and wealth now destroyed. we see the ship in the storm, helpless before the wind, and driven towards the rocky coast, we think naturally of the ruin that threatens it. No one can see the Pyramids without the persuasion that man built them; but what end the builders proposed is at this day a lis sub judice. In this case the reference to the past—the builders—is very clear; but the reference to the future—the final causeis not very evident. So some things in Nature point most clearly to the past, and the process through which they have come, as the stratified rocks, and the denuded valleys; but others, such as binary stars, and what are called rudimentary organs in animals and plants, give us no indication of their relation to the future. But because we cannot always trace the genesis of that which exists, or discern the particular office which it holds in the system of Nature, are we to refuse all recognition to those witnesses of the Creating Wisdom which do appear, or to those indications of the Divine purpose which may be disclosed?

In some cases, the evidences of intelligent arrangement do not consist merely in the production of one organ adapted to a special end, but also in the "coincidence of causes," as M. Janet describes it. A whole series of arranged causes are made to accomplish a common result. The human eye does not consist of a single membrane "becoming sensitive to light." If such a description could be applied to the retina or web of nervous tissue which lies at the back of the camera, we must then account for the crystalline lens which refracts the image, for the opening in the sclerotic at a particular place to admit the pictures of the light, together with the muscular arrangement which by the central will is adapted to near and distant The thing to be explained is not the adaptation of one thing to another, which might be accidental, but in the collection of an entire class of singular but suitable conditions, and the situation of all at the end of the optic nerve by which this wonderful set of instruments is connected with the central organ of sensation. instrument of sight is so perfect that human science can only imitate its appliances for telescopic and microsopic purposes! It will require many ages of positivist declamation to eliminate the persuasion from men's minds that this association of suitable organs, related parts, and well-adapted instruments, is due to anything but an intelligent purpose, and therefore to a Personal Creator.

There is an attack upon the flank of this argument, which is based upon a modern change in the method of physiology:

"The ancient physiology, following the footsteps of Galen, was chiefly occupied with what was called the use of parts, that is, the

appropriation of organs to functions. Impressed above all by the admirable agreement manifest between the form of a given organ—for instance, the heart and its use, it followed this preconceived idea, that in every organ the structure reveals the use, just as in human industry the structure of a machine can à priori reveal its destination. In this view, anatomy was the true key of physiology, and the latter was only its handmaid. By means of the scalpel the true form and structure of organs was discovered, and from thence the uses of these organs were deduced. Sometimes this method led to great discoveries, as happened to Harvey in regard to the circulation of the blood. At other times it led to error. Most frequently men thought they divined what in reality they did nothing but observe. But we may conceive what a considerable part the principle of final causes played in this way of regarding physiology."

"If we are to believe the present masters of physiological science, this method, which subordinates physiology to anatomy, which deduces the uses and functions of structure from the organs, and which is consequently more or less inspired by the principle of final causes, is exhausted; it has become barren, and a more philosophic and profound method has had to be substituted for it. . . . Even did one thoroughly know the structure of the liver, it were impossible to infer the use of it, or at least one of its uses, the secretion of sugar. The structure of the nerves would never show that these organs were destined to transmit either motion or sensation. Besides, the same function may be exercised by organs the most diverse in structure. One and the same homogeneous and amorphous structure virtually contains the aptitude to produce all the vital functions—digestion, respiration, reproduction, locomotion, and so on."-Janet on Final Causes, DD. 109, 110.

The organs, therefore, are resolved into their tissues: and some tissue is nervous, having the powers of sensation and of transmitting impressions from without and determinations from within. Other tissue is muscular, and has contractility for its chief virtue. The organs, being made up of tissues, depend for their effects upon them. But the tissues also may be resolved into the yet more elementary form, the cell:

"Science now only sees in organised bodies results and complications of certain simple elements and cells, the fundamental properties of which are investigated as chemists study the properties of simple bodies. According to ancient ideas, the object which the scientist pursued in his researches was the animal, the man, or the plant; now it is the nerve cell, the motor cell, the glandular cell, each being viewed as endued with a proper, individual, and independent life. The animal is no longer a living being, it is an assemblage of living beings; it is a colony; when the animal dies, each element dies one after the other; it is an assemblage of little egos, to which some even go so far as to attribute a sort of dim consciousness, analogous to the obscure perceptions of the Leibnitzian monads."—Janet, p. 114.

According to this view, then, we have all been the victims of a very complete illusion. Instead of having eyes and ears, and heads, we have only had accidental assemblages of cell and tissue, which have chanced to fulfil many of the functions of the ideal organs which we have so named. Science knows nothing now of a head in which the principal senses might be concentrated, or of a heart constructed to be motive power and regulator of the circulation; the one is the termination of the spinal cord and column; the other is the extraordinary development of the muscles of a bloodvessel. But this change in the tactics of science, though a little startling at first, can work no ill to the doctrine of final causes. The scientist may confine himself rigorously to the lines of his own method, and merely inquire what things are, and how they exist among themselves; then he must leave to others the great questions, Why are they so? and What end do they answer? He is not in a position to deny that God reveals Himself in Nature merely because, so far as his observation goes, all power is invested in matter, or in the creatures; and there are only processes, but not personal acts. This is begging the question altogether.

For, if God is revealing Himself to our time at all, it is under the form of processes of truth and grace in the Church, and of matter and motion in Nature. We may suppose that self-manifestation is a necessity with God; and if so, men ask, What is the manifestation to our age, and where shall we go to behold it? We all admit that the age of miracles is past. That was a long period of wonderful working which is recorded in Scripture; but its marvels were adapted to nations and to men in the infancy and childhood of reason. The power to observe facts and to apprehend their real and unprejudiced value was not yet acquired. Men were on the look out for that which was far off, and unusual, and startling. The first science fixed its gaze upon that which was farthest from common life, and the first man-made religions were identified with astronomy. So, for many ages, a miracle was the only

attestation of God which most men could or would recognise. But now all these special signs have ceased, though the craving after them continues. Men still seek after a sign from heaven. But no sign can be given to them, except the signs of the Son of Man. In the Church—its history, its preservation, its extrication from entanglements of human error and sin, its marvellous extension, and its spiritual triumphs—we think that God still makes bare His arm in the sight of all men. But in the domain of Nature also there is a perpetual and increasingly rapid unfolding of the Divine ideas. The demonstration, to-day, of the vastness, the steadfastness, and the order of Nature, is a very different thing from what it was when a Psalmist exclaimed, "O Lord, our Lord, how excellent is Thy name in all the earth: who hast set Thy glory above the heavens." We have discovered that the sky above us is not the ornamental covering of the tent in which man shelters his little life, but a boundless and fathomless sea, in which are worlds innumerable, both small and great. The sun we know to be a universe of flames, but that its burning had a beginning and must have an end. We are learning that the other worlds floating in space have a similarly mineral and chemical composition with our own, and some of them may have life eras more marvellous than that to which we belong. During the present century men have found out that which only a few dimly suspected before, that our own world has passed through a natural but extended process of change which has spread over millions of years of mineral, vegetable, and animal development. More recently it has been shown that life is everywhere invested in an aboriginal, cellular substance, whose diversified aggregations build up every form of creaturely existence. It is also found that there are clear relations between motion, magnetism, heat, light, and every form of energy, or active force, so that force itself may be but a mode of matter, or matter a mode of force. After this manner has man been introduced into the secret places of Nature. But that which we sometimes call "discovery," as we look upon it from the human side, is Revelation, when we look at it on the Divine side. We may describe it either as man's labour to learn what Nature is, or as the display of "the depth of the riches both of the knowledge and of the love of God," made to our age, lest men should forget the unceasing reverence they owe to Him.

The Universe, then, may be studied in the light of either of these methods. Philosophically, the systems have a clear relation, but are yet independent. The office of the one is to inquire into the nature and causes of all phenomena. It has fulfilled its mission when it has fixed what the thing is, and what are its immediate antecedents and consequents. But the other method ever asks why the thing is as it is; what purpose does it answer; and what is the plan of which this forms a part? Thus, as M. Janet says, "The series of efficient causes is the reciprocal of the series of final causes." But there is this difference also to be noted between them. By the constitution and circumstances of the human mind, the conclusions of the first line of inquiry are capable of demonstration, but not so those of the latter. These can only have a greater or less probability. For instance: it is clear that no plant can grow without a seed; but it is not so clear that the seed was made to produce a plant. Many seeds perish, or they answer other purposes than the production of plants. Yet no one can dispute the propriety of the opinion that seed was intended for this object, who allows that Nature had any ends whatever. And it is felt to be an absurd thing to deny that there are such things as final causes. For, if there were no Intelligence before and above Nature, how could there be intelligence in it, or as a result from it? Here we are once more upon the track of Causality. The intelligence in us, and the marks of which we observe in Nature, must have had an Author.

Yet it must be allowed from what has been said before that we ought to be very cautious about asserting anything about these final causes. "The things of God knoweth no man, but the Spirit of God." That which God does in Nature is evident and undeniable, being understood by the things which are made: but that which God does by Nature. or His ultimate purposes in it, are not known. Lord Bacon urged that the study of Final Causes was a hindrance of science. This has been too often true, yet not so extensively as some suppose; though sometimes facts have been disputed, because their ends were not at once perceived, or because they seemed to militate against the religious theory. Many mischievous results have also followed from the vain and frivolous application of the theory, as when man has been regarded as the supreme object of the creation. Through this error the Copernican theory

had to fight for its existence. Moreover, there are arrangements and adaptations in Nature which do not minister to the comfort and safety of man, but which may be defended as parts of a system which has some other centre; so that a great deal of what Bacon, Spinoza, Descartes, and even Huxley have said against the use of the doctrine of Final Causes may be accepted, but it must ever hold its place among the institutions of reason nevertheless. The observer and investigator of Nature needs it, that he may not lose his sense of intellectual and moral freedom amidst the stern precision of material laws; but, on the other hand, the theologian and the metaphysician need the restraints which material science puts upon their anthropomorphism: the two lines of thought are not only reciprocal and co-ordinate, but mutually helpful, and the time is going by when it will be thought to be the mission or obligation of

either to denounce or disparage the other.

Such, then, is the "Theistic Inference." The world, and all things that exist, must have had a Cause, and that Cause must have been an Eternal and Personal, Intelligent and Benevolent Being. This is the case, and this is the conclusion, so far as rational argument is concerned. There is a psychological question with respect to the origin of the idea of God, but upon that we cannot now enter. It may have been that unfallen man had a direct perception of the existence of God, or at least a positive intuition of it, which the glory of Creation or the truths of Revelation may have at once developed into actual knowledge. But we are not now discussing any such theories, or even the historical question whether men obtained their idea of God from a primitive Revelation, or whether it was a grand discovery of human reason; neither do we say anything upon the theological question whether the primeval faculty for the knowledge of God was obscured by the Fall. We may make a remark, in passing, upon the success with which Professor Flint has pursued and routed Sir J. Lubbock's theory and instances of tribes which are entirely without worship or the idea of God. This doctrine of the native and aboriginal Atheism of man, which no one would entertain except on an antecedent theory, has been hunted down like Cetewayo, and we think we ought to hear little more about it. Our object, however, has been to consider the question in the light of the present day. Does the present state of knowledge permit us to repose upon the

ancient ideas that the world and man have a Creator, Preserver, and Ruler? Is it the boast of modern science that it has discovered direct evidence that an Absolute Intelligence could not exist before Nature? or has philosophy successfully shown that the human soul can never know God, or that religion is, of necessity, a delusion? Our

reply on these points has already been given.

If our readers desire a further examination of these questions, we can confidently commend them to the calm, lucid, and trustworthy volumes of Professor Flint, whose equanimity seldom forsakes him, and who traverses every branch of the subject with equal firmness and facility; or to the volume by M. Janet, the publication of which must influence all the future history of this controversy. Of Mr. Conder's delightful though discursive lectures we have already spoken in this Review, as also of Mr. Jenkins's spirited and suggestive essay.

- ART. II.—1. Encyclopædia Britannica. Arts. "Astronomy,"
 - 2. Chambers's Cyclopædia. Arts. "Astronomy," &c.
 - 8. The National Cyclopædia. Arts. "Astronomy," &c.
 - 4. Other Worlds than Ours. By R. A. PROGTOR. Longmans.
 - 5. Pall Mall Gazette. March 6, 1879.
 - 6. Our Rest. Chicago, June, 1879.
 - 7. Annales de l'Observatoire de Paris. Tome XI.

After the lapse of ages man has not ceased to wonder. He has gained a truer knowledge of the heavenly bodies their sizes and distances, their mutual relations, the purposes they subserve, and the laws that govern them. He can weigh and measure them, and even detect some of the substances of which they are formed; but the universe is more wondrous and more mysterious to us than it was to the primeval rustic when his untutored eye first surveyed its glories. The ever-increasing circle of light around us only reveals a still wider circle of darkness in the infinity beyond; and though man can transcend the bounds of the solar system, and with the whole diameter of the earth's orbit as a base, can push out his triangles far into the depths of space, and take hold of the stars, and bring them within the range of his knowledge, there are problems much more nearly affecting our world in its relation to the other members of the solar system which still remain unsolved. The old astrology has been dethroned after a dreary reign of forty centuries; and modern inductive science has taken its place; but there are still subtle influences in sun and moon and planets of which the latter has not yet given us a sufficient explanation. The extraordinary discoveries of the past twenty years as to the nature of the sun's photosphere, the periodical return of the phenomena known as sunspots, and the magnetic influence of these upon our world, have carried us forward into regions of greater certainty, and prepared the way for future triumphs; but we may still pertinently ask, to what

extent is the meteorological state of the earth dependent on the condition of the sun's photosphere? How far is it influenced by the moon? What share have the planets especially the larger planets—in it? And, granting that the influence of these is guided by unerring wisdom and must be beneficial on the whole, have we any reason to fear that their combined effect, under peculiar circumstances only occurring at long intervals, are likely to prove

injurious to mankind?

These points form the subject of our present inquiry. We are just entering on a deeply interesting era in the history of the solar system, namely, the nearly concurrent perihelia of the four major planets, Jupiter, Saturn, Uranus, and Neptune: and as this is an event of very rare occurrence, it is naturally exciting a good deal of attention in scientific circles. But it has also to some extent revived the old spirit of judicial astrology; as certain periodicals both in England and America have put forth gloomy prognostications of coming calamities as likely to arise from the approaching perihelia. These predictions do not profess to have any scientific basis. They are avowedly empirical-appealing to the records of the past, and asserting that famines, pestilences, and other evils have invariably accompanied the perihelia of the larger planets in former times. It will be perfectly easy to show that the supposed connection between perihelia and pestilence, &c., is an utter delusion, and we shall briefly adduce the evidence of this before we close; but our present purpose is to state the facts as known to science, to define the present limits of our knowledge, to consider the directions in which we may expect that knowledge to increase, and to inquire into the degree of scientific probability or improbability which exists that the coming perihelia will seriously disturb the meteorological condition of our world.

Jupiter, the largest and the nearest of the major planets, will reach his perihelion, or point of nearest approach to the sun, in September, 1880; Saturn, the next in size and proximity, about September, 1885; and Uranus, the third in distance but the fourth in magnitude, in April, 1882. Neptune, according to the position of the true ellipse which best describes his orbit, should also have reached his perihelion in 1882; but he has fallen under the perturbing influence of Jupiter, by which he was drawn so far out of

his true course in 1876-7, and will again be so far drawn aside in 1887-8, that he has in reality two perihelia, or points of nearest approach to the sun occurring within about eleven years of each other, instead of the one which would have fallen to his lot in 1882 if he had been left to pursue his solitary journey undisturbed. The perihelic period under consideration, therefore, instead of commencing in 1880 and ending in 1885, extends over about eleven years, beginning in 1876-7. This affects our calculations, to some extent, as to the perihelic coincidences of former times, as it is hardly likely that Neptune has previously been free from such disturbances; but as he cannot be very far from his perihelion at the true period assigned, we may, for the purposes of calculation, disregard the perturbations and adhere to his proper course in the heavens.

In 1714-17, the perihelia of Uranus and Neptune were only about three years apart, and Jupiter was also in perihelion in the former year; but Saturn reached his perihelion in 1708, so that the perihelic period was more extended than the approaching one. We now go back about 4,000 years from A.D. 1882 to B.C. 2069-67, and again we find Uranus and Neptune in perihelion very nearly together. From that date the period of their perihelia receded from each other at the rate of about three and a half years for each revolution of Neptune, till the year B.C. 93, when Neptune was in perihelion and Uranus was near his aphelion, or furthest distance from the sun. From B.C. 93 their perihelia have gradually approached each other in the same ratio; and in A.D. 1882 they will coincide. Calculating the perihelia of Jupiter and Saturn backwards, we find that the former must have been in perihelion in B.C. 2069, and the latter in B.C. 2064; so that we have in the five years B.C. 2069-64 a perihelic period very closely resembling the one through which we shall pass in the next decade, and we see that the enormous gap of 3,944 years lies between them. One hundred and sixty four years earlier, in B.c. 2233-35, Uranus and Neptune were also in perihelion within two years of each other, and Jupiter and Saturn were not far away. This carries us back to a time when, if we are to receive the common

We are indebted for this deeply interesting fact, as well as for other important data embodied in this article, to the courtesy of the Astronomer Royal.

chronology, Noah was yet alive, and all mankind were dwelling together on the plain of Shinar, and the Egyptian, Babylonian, and Assyrian Empires had not yet been founded! What empires will rise and fall, and what changes will take place in the condition of our world before Jupiter, Saturn, Uranus, and Neptune, pursuing their solitary journeys in the great pathway of the skies, will meet in perihelion again about the years 5831-3.

In fixing upon the foregoing dates we have made allowance for all disturbing elements, so far as they are known, and we do not suppose that in any case the error would amount to more than a small fraction of a year, though there must always be a degree of uncertainty in calculations of this kind. Besides the perturbations caused by Jupiter in the orbit of Neptune, there are other sources of irregularity, slight in themselves, but very appreciable when we come to deal with cycles of 4,000 years. The change from "old style" to "new style" in the calendar involves a discrepancy of twelve days; and various expedients have to be adopted to adjust the calendar, or civil year, to the actual time of the earth's revolution round the sun. If we forget our leap-years we shall be nearly three years out of our reckoning, and even they require continual adjustment. The solar year being 865 d. 5 h. 48 m. 49.62 s., it might seem at first sight that it and the civil year are made to correspond sufficiently by adding a day to the 365 in leap-year, and disregarding the fractions; but by doing so we place the latter in advance of the former by nearly three-quarters of an hour every four years, which amounts to rather more than three days every four centuries. Therefore, according to the method of intercalation initiated by Pope Gregory XIII., and adopted by all Christian countries except Russia, the leap-year is dropped in the last year of each century, except those which are divisible by Thus the years 1900, 2100, 2200, and 2300 will not 400. be leap-years, although they occur in the four year-period; but the years 2000, 2400, 2800, &c., will be leap-years. This, however, leaves an excess in the civil year of one day in 3,886 years; and therefore the centuries which are divisible by 4,000, namely 4000, 8000, 12000, &c., will not be leap-years. Thus the uniformity of the intercalation, by continuing to depend on the number four, is preserved, and by adopting this last correction the commencement of the year will not vary more than a day from its present place

in 100,000 years, before which time the necessity for such adjustments may have passed away. The difference between the ordinary leap-year period and the true calendar is about thirty days in the 4,000 years which elapse between

the concurrent perihelia of Uranus and Neptune.

A more important variation is caused by the mutual attraction of the planets, which results in "the progression of the lines of their apsides"—a term which holds good in the case of all the planets except Venus, whose line of apsides is retrogressive. The perihelic or aphelic point on the circumference of the ellipse which describes a planet's orbit is also called its apsis, and an imaginary straight line uniting the two points is called the line of its apsides. If there were only one planet revolving round the sun, and its orbit were elliptical, its perihelic and aphelic points would remain stationary, and it would reach its perihelion at the moment of completing its revolution; but each planet influences its fellows, and draws them out of their true If anything less than infinite wisdom and almighty power had established the order of the universe, the consequences of these irregularities must have been the ultimate collapse of the solar system; but long observation and careful calculation have proved that when the disturbance has reached a certain maximum, beyond which it would have been injurious, the very causes which produced it begin to operate in the opposite direction, and the balance of the system is preserved. The eccentricity of the orbits of Mercury, Mars, and Jupiter is increasing; that of the orbits of the earth, Venus, Saturn, and Uranus is decreasing: but in either case there is a maximum and a minimum of eccentricity which cannot be overstepped. and between which the orbits slowly oscillate. From the same cause the perihelia and aphelia of all the planets are continually changing their places on the planes of their orbits. Except in the case of Venus, the movement is in the same direction as the planet's revolution, so that the journey from perihelion to perihelion takes longer than the revolution round the sun. The earth's perihelion travels at the rate of about twenty-five minutes a year, and journeys completely round her orbit in about 21,000 years. Her "anomalistic year," therefore, is twenty-five minutes longer than her true solar period. The perihelion of Venus comes to meet her. Those of the other planets flee, and have to be pursued and overtaken.

The position of a planet in its orbit at any given time being ascertained, the longitude of its ever-shifting perihelion can be calculated; and Le Verrier has computed the longitudes of the four large planets for the years 1850, 2350, and 2850, as shown in the following table.—(Annales de l'Observatoire de Paris. Tome XI.)

	(A.D. 1650	A.D. 2850	A.D. 2650
Jupiter	 11° 54′ 53″	13° 0′ 4″	14° 7' 7°
Saturn	 90° 6′ 12°	92° 55′ 1″	95° 45' 29"
Uranus	 168° 16' 45"	168° 44' 35"	169° 12' 11"
Neutane.	47° 14′ 37°	47° 21′ 35°	47° 28' 46"

These figures are a striking illustration of the exactness and comprehensiveness of modern science, and ought to be sufficient of themselves to silence the prophets of evil, and to reassure the public mind, so far as it has been disturbed by prognostications of coming calamities. The changes in the solar system resulting from the influence of the planets upon each other are so slow and so nearly uniform as to afford conclusive evidence that no great disasters need be apprehended from their perihelic coincidences. perihelion of Jupiter is advancing at the average rate of 2º 12 14' in 1,000 years, and would travel round his orbit in about 163,000 years if its speed were uniform. As he performs about eighty-four revolutions in 1,000 years, his perihelion moves forward at the mean rate of 1'34' for each revolution, representing 7h. 34m. 37s. in time, and nearly 219,000 miles in distance. The perihelion of Saturn is advancing at the rate of 5° 39' 17" in 1,000 years, and will travel round his orbit in about 63,000 years. He completes nearly thirty-four revolutions in that period, which gives 9 58 for each revolution, or nearly five days in time, and 2,400,000 miles in distance. Uranus performs about twelve revolutions in 1,000 years, and his perihelion travels at the rate of 4'37' each revolution, representing about 6d. 13h. 30m. in time, and 2,370,000 miles in distance. The progress of Neptune's perihelion in 1,000 years is only 14 9; but as he only journeys round his vast orbit about six times in each millennium, the advance of his line of apsides each revolution is 2' 21', which is equal to 6d. 13h. in time, and 1,900,000 miles in distance. All such irregularities as the foregoing have to be taken into account in calculating the perihelia of the planets; but it will be seen that they help us to arrive at the results with a considerable degree of certainty.

is hardly necessary to observe, in explanation of the above calculations, that the value of a degree of celestial longitude varies according to the planet's distance from the sun. For the earth's orbit it is about 1,600,000 miles; for Jupiter, 8,300,000 miles; for Saturn, about 15,000,000 miles; for Uranus, nearly 31,000,000 miles; and for Neptune, above 48,000,000 miles—that is, estimating the earth's mean distance, which is the standard of measurement for all the rest, at 92,000,000 miles.

In estimating the probable effects of the perihelia of the four larger planets, it is very important to observe the degree of ellipticity of their orbits. The astronomical maps and charts which are prepared for the use of schools, even when they give the true idea of ellipticity, often do so in an exaggerated form. We have seen diagrams of our own planet's orbit, with the sun placed in one of the foci so very distant from the centre, and so perilously near to her perihelic point, that assuredly if she were to venture so near to the orb of day, "the earth and the works that are therein would be burned up, and the elements would melt with fervent heat;" or if she were travelling towards her aphelion, long before she reached it the ocean would become a frozen mass, and every particle of moisture in the atmosphere would fall as snow: and every living thing would die. After stating the degree of ellipticity of the four larger planets, we shall try to make their values appreciable by exhibiting them on a reduced scale. The distance of either focus from the centre of the ellipse marks the degree of eccentricity; and the sun occupies one of the foci of the ellipses in which the planets respectively revolve. An imaginary straight line uniting the circumference at its largest diameter. and passing through the centre and both foci is the major axis, and also the line of apsides, because it connects the perihelic and aphelic points. A straight line passing through the centre at right angles to the other, and uniting the circumference at the smallest diameter is the lesser axis. The eccentricity of a planet's orbit, therefore, is the distance from the centre to the focus occupied by the sun; and the mean distance from the sun is the length of the semi axis major. The following table shows the mean distance of the earth and the four larger planets from the sun, their eccentricity in miles; and the proportions between the two.

			Mean distance.	Eccentricity.	Proportion of mean distance to eccentricity.
The Earth Jupiter Saturn Uranus	:	:	92,000,000 miles- 478,000,000 ,, 877,000,000 ,, 1,764,000,000 ,,	1,544,000 miles 23,020,000 49,249,000 82,221,000	about 1 in 60 about 1 in 21 about 1 in 18 about 1 in 21
Neptune .	:	:	2,765,000,000 .,	23,500,000 ,,	about 1 in 117

These figures are not so formidable as, at first sight, they appear. The elongation of the orbits, when reduced to a scale which would enable the eye to take in the ellipses at a glance, is not apparent, and could not be ascertained without measurement. Perhaps the best way of representing the orbits of the planets, for educational purposes, is to make them circular, with the sun slightly displaced from the centre. If a disc of cardboard, elliptical in form, and twelve inches in diameter, be laid upon a table, the table will represent the plane of the earth's orbit, and the circumference of the disc will be the orbit itself. Two small holes through the major axis. about one-tenth of an inch from the centre on each side. will represent the foci; and the total ellipticity will be less than the five hundredth part of an inch. The disc will therefore be 12 by 11.998 in. A similar disc representing the orbits of Jupiter, Saturn, and Uranus would be about 12 by 11.984, and the focus would be about three-tenths of an inch from the centre; whilst a disc representing Neptune's orbit would be 12 by 11.9996. It would only require a focus one-twentieth of an inch from the centre, and would be so nearly circular that even the practised eye of an artist could not detect the ellipticity. If a pin be driven into the table through the hole representing the sun's position, and the disc be made to revolve slowly round it, the movement will represent the progression of the line of apsides, which is in fact a change of position of the whole ellipse in the plane of its orbit.

We must observe that there is nothing in common between the perihelia of the planets and the astrological conjunctions of the heavenly bodies. In astrology the heavens were divided into twelve equal sections called "houses," by six circles intersecting each other at the poles, and enclosing 30° of celestial longitude at the ecliptic, corresponding with the astronomical division of the zodiacal belt, and bearing the names of its constella-

tions. All the members of the solar system, including sun and moon, which happened to be in the same "house" at any given moment, were said to be in conjunction without respect to their distances from each other, or their true positions in the heavens. Some of the "houses" were benignant in their aspect, and others malignant. Some of the heavenly bodies were also propitious or the reverse, so that their various conjunctions and oppositions, and their location in different "houses," afforded endless scope for evil prognostications or ameliorating circumstances. gloomy and fatalistic system obtruded itself far beyond the domain of physics, and cast its ghoul-like shadow over all the political, moral, and social relationships of life; crushing out every noble aspiration, and binding man down by an iron destiny which pursued him from his cradle to his grave. It still holds sway over three-fourths of the human race in Mohammedan, Hindu, and Buddhist countries, and has only receded before science and the Gospel in Christian lands; and yet we find an American religious periodical of the advanced millenarian type speaking of it in the following terms:

"Within the last two years that ancient study, which for many conturies from a remote antiquity ranked as the first and most profound of sciences—astrology—has been revived in a form that is exciting deep interest, and engaging the attention of the leading savants in Europe and America. Although astrology in modern times has been ignored by intelligent people as an utterly groundless and exploded science, pertaining to the ignorant educations and superstitions of the ancients, the theory which is now powerfully supported by eminent scientists that the natural processes of the earth, electrical phenomena, great calamities in the form of earthquakes, tornadoes, floods, droughts, pestilence and famine, and even political and social conditions, are subject to planetary influences, is nothing less than the old astrological study divested of the superstitions and absurd theories with which it was surrounded in the middle ages. What astrology was in that remote period when it was allied with the religious systems of Phænicia, Persia, and Egypt, when it involved an advanced degree of astrological knowledge, governed the rules of architecture, and the philosophy of government; when it indicated to the sages of Chalden the all-momentous event in human history, and directed their way to the lonely hamlet of Bethlehem, must ever remain a solemn mystery. It must be regarded as the greatest and all-comprehensive of the lost sciences, unless the studies of the present day of planetary relations and their influences be the

restoration of astrology to its original form of truth and systematic calculation in the auspicious light of modern research."—Our Rest, June, 1879.

It is greatly to be regretted that papers which profess to lead the van of the Christian army should thus seek to revive astrology, and to ally themselves with it, in order that they may draw from it some countenance to their extraordinary theories about the sudden and speedy collapse of the Christian dispensation; and yet they make no secret of their belief that the perihelia of the four larger planets will bring about the last great tribulation which is to prepare the way for the Saviour's second advent!

The perihelia of the planets is also something quite apart from what are popularly called "conjunctions" of the moon and other members of the solar system, the term having survived its astrological significance, just as we retain traces of a long extinct heathen mythology in the names of our days and months. When the moon and one or more of the planets are nearly in a line as seen from the earth, they are said to be in conjunction, without respect to their distances from the sun, the earth, or from each other. Some months ago Saturn and Mars, when they rose in the east a little after midnight, were apparently so near to each other that they seemed to be only one star when viewed without the aid of a telescope, though neither of them was in perihelion, and they were not at their nearest point of approach to each other; but the event suggests the idea that perhaps the inhabitants of Saturn, if such there be, sometimes witness the very interesting spectacle of two or more planets in transit across the sun's disc at the same time, a treat with which the most deserving of our mundane astronomers have not vet been favoured!

The attraction of gravitation is one of the most potent elements involved in the consideration of our subject; but as the masses and distances of the various bodies of the solar system have been determined with tolerable accuracy, and as the operation of the law of gravity is uniform, we know what degree of attractive force can be brought to bear upon the earth at any point of her orbit by any of the planets, or all of them combined; and it is therefore sufficient to remark that there is not the smallest danger that she will be so drawn aside from her true path in the heavens as to be parched by excessive heat or chilled by

excessive cold. She will hold on her way, guided by an unseen but almighty and unerring hand, as safe and as unconscious as a slumbering infant in its mother's arms. The whole result of the combined attractive force of the solar system upon our world is shown in the slow and almost uniform progression of her line of apsides, and in the ultimate correction of all irregularities when the maximum of disturbance has been reached. It might be urged, indeed, in proof of extraordinary perturbations, that Neptune's course is so seriously interfered with by Jupiter; but it must be remembered that the attractive force of the sun is 900 times greater at the Earth's distance than at that of Neptune, so that he holds our world with a firmer grip. His influence on the Earth is 28,000 times greater than that of Jupiter; but it is only about 700 times greater than that of Jupiter over Neptune; and further, the distance of the latter from his perihelion when the disturbance takes place is only about twelve degrees on each side, so that a very slight deviation from his proper course would bring him nearer to the sun than he would have been in his true perihelion. On the supposed cardboard disc representing his orbit, the displacement would only amount to the one hundred and fiftieth part of an inch, and would in fact be imperceptible.

Heat, light, and magnetism are the cosmic forces which we have still to notice; but the two former may be speedily dismissed. There is no possibility of any excess, or even of any appreciable increase of heat, as resulting from the nearer approach of the larger planets. Though they radiate heat, like all the other heavenly bodies, the portion of it which reaches the earth under any circumstances is infinitesimally small, and cannot be taken into account. They are also light givers: self-luminous in greater or less degree, like all the other planetary bodies, and the earth itself; but, as far as we know, they are only seen by the light which they receive from the sun and reflect back upon us, and although this will be a little greater in perihelion than in aphelion, it is many degrees less than the difference arising from the earth's annual revolution. which brings them nearer or removes them further, by the

whole diameter of her orbit.

The magnetic condition of the earth, and her magnetic relations to sun, moon, and planets require fuller treatment, because it is here, if anywhere, that the perihelia of the larger planets will be felt; but we think it can be shown that their influence in this respect also is perfectly and absolutely harmless. The mass of the sun is fully 740 times greater than that of all the other members of the solar system combined. He is equal to 1,047 planets as large as Jupiter, 3,496 as large as Saturn, 24,900 as large as Uranus, or 18.780 as large as Neptune; and his mass would form 355,000 worlds of the same volume and density as the earth! Here we might rest. The magnetic power of the sun upon our world must be so overwhelming, that we might fairly disregard the influence of all the other members of the solar system; but we have not yet fully stated the case. The attractive and repulsive forces of magnetism, where there is no lineal conductor, such as a metal wire or rod, observe the same law as light, heat, and gravity. They diminish as the squares of the distance increase; and Jupiter might be removed so far away that the smallest of the planetoids would be a more important factor than he in influencing the conditions of life on our globe. Each member of the solar system is a magnet; and of course it cannot be demonstrated that its magnetic force is in exact proportion to its volume or density. may vary as much as its luminosity or temperature, apart from the degrees of heat, light, and magnetic power which it receives from the sun; but in the absence of any means of determining its inherent magnetic force, we may fairly assume that it is in proportion to the mass; and the onus probandi would rest upon those who chose to adopt a different standard. It may also be fairly assumed that if any member of the solar system has an excess of magnetic power in proportion to its mass it must be the sun himself, as the most potent of all the causes of magnetic intensity is heat, and none of the planets can have a temperature at all approaching to his, even taking into account the enormous disparity between their respective masses.

The mean distance of the sun from the earth being estimated at 92,000,000 miles, and his magnetic force being at least 1,047 times greater than that of Jupiter, placed at the same distance, and Jupiter's distance from us being more than five times greater than the sun, it follows that 28,000 planets equal to him, and revolving in his orbit, would be required, in order to exercise the same degree of magnetic influence on our world. As his diameter is about

86,000 miles, and the circumference of his orbit about 2,992,000,000 miles, these 28,000 planets, arranged along his orbit so as to touch each other, would reach five-sixths of the distance round it, and would look like a very pretty "horseshoe" about 5' in diameter, as seen from the nearest fixed star! The results are even more startling in the case of the other large planets. Saturn's mass is 3.496 times less than that of the sun, and his distance from us nine and a half times greater. His diameter is about 75,000 miles, and the circumference of his orbit 5.480,000,000 miles, so that 315,000 planets of his size and distance would be needed to exert the same magnetic power over us as the sun, and these would encircle his orbit more than four times. The mass of Uranus is 24,900 times less than that of the sun, and his distance nineteen times greater. His diameter is 33,500 miles, and the circumference of his orbit 11,025,000,000 miles, so that the sun's magnetic influence upon us is equal to above 9,000,000 planets like Uranus, and these would reach round his orbit above twenty-seven times. Neptune is 18.780 times less than the sun, and his distance is thirty times greater. His diameter is 37,250 miles, and the circumference of his orbit 17,384,000,000 miles. Therefore it would require nearly 17,000,000 Neptunes to equal the magnetic force of the sun, and these would extend round his orbit above thirty-six times. These calculations are based on the mean distances; let us see how far they have to be corrected to represent the four larger planets in their perihelia. Their perihelic distances are-Jupiter, 455,000,000 miles; Saturn, 828,000,000 miles; Uranus. 1,682,000,000 miles; and Neptune, 2,742,500,000 miles. Even with these figures, the sun's magnetic power over the earth is equal in round numbers to 26,700 Jupiters, 298,000 Saturns, 8,000,000 planets like Uranus, and 16,750,000 Neptunes. In view of these facts, it seems exceedingly improbable that the most careful scientific investigation will ever be able to detect the slightest variation of the magnetic needle which could fairly be attributed even to Jupiter in perihelion; and if he cannot make his nearer presence felt, the still more delicate pulsations of the other three must be utterly beyond the range of observation; for Jupiter's magnetic force, so far as we are concerned in it, is equal to that of 11 Saturns, 338 planets like Uranus, or 607 Neptunes! Nor would a combination of the

four planets materially alter the case, for if they reached their perihelia at the same moment, and in the same longitude, so that the earth were exposed to their collective influence in passing between them and the sun, the magnetic force of the sun would still be above 25,000 times greater than theirs; but the perihelic period extends over eleven years, during which Jupiter will nearly accomplish a revolution round the sun; and the perihelia of the four major planets are in longitudes varying from 11° to 168°, representing nearly half the circuit of the heavens; so that the influence, almost infinitesimal in itself, will be broken and dispersed, and the earth will put the whole diameter of her orbit between herself and each of the larger planets no less than eleven times before the perihelic cycle is complete. It is simply inconceivable, therefore, that so small an increment of magnetic power could sensibly affect the meteorological condition of our world.

If any member of the solar system except the sun produces an appreciable effect upon the weather and other meteorological conditions of the earth, it must be the moon. It is true that her mass is only one twentyeight millionth part of that of the sun, but she has the enormous advantage of being about 385 times nearer, so that the square of the difference in their distances being 148.225, her comparative magnetic force is only 190 times less than his. Can she produce any sensible variation of the magnetic needle? Many scientists now affirm that she exercises no meteorological influence over us; but the queen of night, who has so long held sway over a too faithful and devoted people, will not be easily dethroned; and the weather prophets will still watch her phases anxiously, though it may be fruitlessly, for indications of coming change. Sir John Herschel stated, as the result of many years' experience, that the moon, when about the full, generally disperses the clouds, so that we may reasonably expect fine nights about that season, however wet the days may have been, and he invites others to make observations for the confirmation or contradiction of his theory. Those who will take the trouble to watch for a few years will probably arrive at the conclusion that "there is something in it;" and if so, the influence is undoubtedly magnetic. We would also advise our readers not to sleep with their faces exposed to the moon's rays. as this is said to produce night-blindness, contortions of

the features, and other evils, especially in the tropics. We have known persons who, for weeks together, could not see the flame of a lamp in the night season, and who attributed the partial paralysis of their optic nerves to this cause. It must be admitted that the moon's influence over the weather, and other meteorological conditions of the earth, has been greatly exaggerated; but we must not therefore hastily conclude that she has no influence at all. Whatever conclusion may be ultimately reached on this point, however, it will not affect our general argument, for her magnetic force is equal to that of 147 Jupiters, 1,668 Saturns, 49,800 planets Uranus, or 89,470 Neptunes, even

when they are in perihelion.

We have still to approach the subject from another point, namely, the direct magnetic influence of the sun upon the earth, and the supposed reflex influence of the planets, arising from their action on the sun's photosphere. There are variations of the magnetic needle extending over long periods of time. At present it points considerably to the west of the North Pole. Three hundred years ago it pointed to the east of north, and it slowly changes its direction from year to year. There are also slight daily and hourly variations; but in addition to these, which are regular and can be accurately calculated, the needle is subject to irregular changes, jerking suddenly to one side, as if by an electric shock, or swaying backwards and forwards as if shaken by the wind, whilst there is no visible cause of disturbance; and these convulsions last for hours or even days, and sometimes extend over the whole earth. These phenomena are called magnetic storms, and are accompanied by brilliant displays of the aurora borealis. One of these storms has led to very remarkable discoveries. From the 28th of August to the 4th of September, 1859, the earth was convulsed with electricity. On the first of September in that year-

[&]quot;The eminent solar observer, Carrington, noticed the apparition of a bright spot on the sun's surface. The light of this spot was so intense that he imagined the screen which shaded the plate employed to receive the solar image had been broken. By a fortunate coincidence, another observer, Mr. Hodgson, happened to be watching the sun at the same instant, and witnessed the same remarkable appearance. Now it was found that the selfregistering magnetic instruments of the Kew Observatory had been sharply disturbed at the instant when the bright spot was seen;

and afterwards it was learned that the phenomena which indicate the progress of a magnetic storm had been observed in many places."—Other Worlds than Ours, p. 83.

The bright spot, which was in reality a vast white cloud, swept beside and across a large sunspot which was under observation at the time, and travelled 35,000 miles in about five minutes. After a while accounts began to pour in of extraordinary events occurring at the moment when the white cloud appeared. Telegraphic communication was greatly interfered with. At Washington and Philadelphia the signalmen received violent shocks. At Boston, U.S., a stream of fire followed the pen of Baines's telegraphic apparatus, and a telegraph station in Norway was set on fire. That night brilliant auroras were witnessed, not only at Rome, but in the West Indies, South America, Australia, and many other places

where they are seldom seen.

That day marks the beginning of an epoch in the history of Astronomical and Meteorological science. The bright spot on the sun's surface bears some analogy to the falling apple in the garden at Woolsthorpe which suggested to Newton's mind the idea of gravitation. It has fully established the fact that terrestrial magnetism is dependent on the condition of the sun's photosphere; and that he is the chief, if not the only, cause of all the meteorological influences that affect our planet. The sunspots, which are so intimately associated with magnetic storms on earth, reach their maxima in cycles of about eleven years and a quarter -subject, however, to an occasional irregularity of one or two years in excess or defect. Mr. Ellis, of the Royal Observatory, Greenwich, has examined the observations made from 1841 to 1877, including the diurnal range of magnetic declination and horizontal force, and states that "in addition to the ordinary diurnal and annual changes, there appears to exist in the magnetic diurnal range an inequality of marked character and of longer period, resembling in its features the well-established eleven-year sunspot period." Very remarkable correspondences are also shown between the rapid sunspot and the sudden magnetic variation; but generally the magnetic epochs are a little later than the corresponding sunspot periods. Mr. Ellis further states that "it seems probable that the annual inequalities of magnetic diurnal range are subject also to periodic variations, being increased at the period of

a sunspot maximum, when the mean diurnal range is increased; and diminished at the time of a sunspot minimum, when the mean diurnal range is diminished."

But though we have every reason to believe that the planets cannot produce any appreciable direct effect upon the meteorological condition of the earth, either in their aphelion or perihelion, do they, when in perihelion, seriously disturb the photosphere of the sun? and are their magnetic effects thus reflected back upon us indirectly? This is a point of great importance, and requires careful examination, because some scientists have adopted this hypothesis, and are disposed to attribute the sunspots and other disturbances of his photosphere to the action of the planets, and more especially of Jupiter when in perihelion. We should have fallen back upon the very strong antecedent improbability that the planets-whose combined mass is seven hundred and forty times less than that of the sun; whose distances so largely diminish their magnetic force; and whose perihelic distances vary so slightly from their mean distances—could perceptibly affect the sun's condition; but as some astronomers have adopted the opposite view, we must state our reasons for dissenting from it. We are glad to observe the hesitating tone of the following passage from Mr. Proctor's Other Worlds than Ours, though he so largely endorses the hypothesis.

"Schwabe found that in the course of about ten and a half years the solar spots pass through a complete cycle of changes. They become gradually more and more numerous up to a certain maximum, and then as gradually diminish. At length the sun's face becomes not only clear of spots, but a certain well-marked darkening around the border of his disc disappears altogether for a brief season. At this time the sun presents a perfectly uniform disc. Then gradually the spots return, become more and more numerous, and so the cycle of changes is run through again. The astronomers who have watched the sun from Kew Observatory have found that the process of change by which the spots sweep in a sort of 'wave of increase' over the solar disc is marked by several minor variations. As the surface of a great sea wave will be traversed by small ripples, so the gradual increase and diminution in the number of the solar spots is characterised by minor gradations of change which are sufficiently well marked to be distinctly cognisable. There seems every reason for believing that the periodic changes thus noticed are due to the influence of

the planets upon the solar photosphere, though in what way that influence is exerted is not at present perfectly clear. Some have thought that the mere attraction of the planets tends to produce tides of some sort in the solar envelopes. Then, since the height of a tide so produced varies as the cube or third power of the distance, it has been thought that a planet when in perihelion would generate a much larger solar tide than when in aphelion. So that as Jupiter has a period nearly equal to the sunspot period, it has been supposed that the attractions of this planet are sufficient to account for the great spot period. Venus, Mercury, the Earth, and Saturn have, in a similar manner, been rendered accountable for the shorter and less distinctly marked periods. Without denying that the planets may be, and probably are, the bodies to whose influence the solar spot periods are to be ascribed, I yet venture to express very strong doubts whether the attraction of Jupiter is so much greater in perihelion than in aphelion, as to account for the fact that whereas at one season the face of the sun-shows many spots, at another it is wholly free from them."-Other Worlds than Ours, pp. 27, 28.

And it is probable that the more this hypothesis is examined the more our doubts will increase, till we arrive at the conclusion that it cannot be maintained. In the first place, there is no real analogy between our oceanic tides and the phenomena known as sunspots, and the comparison is an unfortunate one. Our tides are not vast whirlpools hundreds of miles in diameter, laying bare the depths of the ocean, and covering its surface with widespread desolation and ruin. The sun and moon do not produce even a ripple on its surface. They simply draw the waters up, and the tidal currents, &c., are caused by the earth's rotation on her axis. The true analogy is between sunspots and atmospheric storms. The envelopes of the sun are not supposed to be liquid but vaporous; and the sunspots seem to bear some resemblance to huge cyclones, rending the photosphere and opening vast gaps many thousand miles wide and deep, and revealing the solid body of the sun beneath. As the dark spots are frequently associated with bright spots, or faculæ, which follow in their wake, it seems probable that the former are openings through which the relatively cool gases of the outer atmosphere rush down upon the body of the sun. whilst the latter are masses of burning hydrogen, or other gaseous elements, which burst up through the envelopes with inconceivable force and velocity; the two classes of

spots thus acting like the "downcast" and "upcast" shafts in a coal mine, so that the outer atmosphere of the sun is periodically renewed. Some of the "upcast" openings have been seen to throw up columns of burning hydrogen to a height of 79,000 miles in a few hours. Some of the sunspots are more than 50,000 miles in diameter—above half the diameter of Jupiter himself—and wide enough to allow six planets as large as the earth to be dropped in side by side. Where are the cosmic forces, outside of the sun himself, which are capable of producing such effects as these? And where is the necessity to seek for them, when the phenomena seem to admit

of a simple and natural explanation?

In other respects also the tidal hypothesis seems to be strangely at variance with facts. Jupiter is credited with the chief phenomena — the slowly recurring sunspot maxima—and the minor ripples are attributed to Mercury. Venus, the Earth, and Saturn. Let us therefore estimate their comparative tidal force as exercised on the sun's photosphere. The mean distance of Mercury from the sun is about 34,500,000 miles; but, owing to the great eccentricity of his orbit, he is nearly 42,000,000 million miles distant in his aphelion, and only 27,500,000 distant in his perihelion. The distance of Jupiter from the sun when he is in his perihelion is 455,000,000 miles, or sixteen and a half times greater than that of Mercury: and as the tidal power is in inverse ratio to the cubes of the distance, this nearly counterbalances the difference in mass. Jupiter's mass is about 4,600 times greater than that of Mercury; but his tidal force is proportionately 4,490 times less; so that Mercury would raise a tide in the sun's photosphere very nearly equal to that of Jupiter, when both were in perihelion; and when the latter was in aphelion the tidal force of Mercury would be one-fourth greater than his. If, therefore, we assign the terrific cyclones in the sun's photosphere to him, we must give Mercury credit for something more than ripples! And further, as Mercury's tidal power is three times greater in perihelion than in aphelion, we should expect very clearly marked sunspot periods every three months when Mercury was in perihelion. The case is still stronger with regard to Venus. Her mass is about 384 times less than that of Jupiter: but she is above seven times nearer, and the cube of the ratio between their respective distances is 389. Her

tidal power is consequently always greater than his, so that Mercury and Venus are quite equal to two Jupiters; and if there were any truth in the tidal hypothesis we should expect tremendous convulsions in the sun's photosphere every four months, or thereabouts, when the two inferior planets are in the same longitude. All this, however, is on the supposition that the laws which govern tides are applicable to incandescent vapours, which are much more likely to be ruled by chemical affinities than by the attraction of gravitation. It was by a singular oversight that Saturn was classed with Mercury and Venus, and was credited with disturbances of short duration; but it shows that the hypothesis is crude, and that those who have adopted it have done so without sufficient calculation.

The remaining hypothesis, that the sunspots are produced by the planets in some way not yet defined, is also beset with serious difficulties. We might indeed wait till some rational explanation is offered, and some evidence adduced: but one or two considerations will show its extreme improbability. The mass of all the planetary bodies united is so small in comparison with that of the sun, and their magnetic power is so diminished by distance, that we cannot conceive of any serious disturbance arising from this source. If we reduce the solar system, or that part of it with which we are just now more immediately concerned, to a scale of one mile to a million, the sun will be a globe 1,550 yards, or about seven-eighths of a mile in diameter; and the earth will be a ball 14 yards in diameter, placed at a distance of 92 miles. A ball 150 yards in diameter, at a distance of 478 miles, will represent Jupiter; and Saturn will be a ball 132 yards in diameter, at a distance of 877 miles; Uranus a ball 58 yards in diameter, at a distance of 1,764 miles; and Neptune a ball 66 yards in diameter, 2,765 miles away. These stand for their mean distances. To show their distances in perihelion. they must be brought nearer to the central globe as follows: the Earth one and a half miles, Jupiter 23 miles, Saturn 49 miles, Uranus 82 miles, and Neptune 231 miles. Even when these corrections have been made, it is not easy to imagine that planetary bodies of their size, and so placed, could produce changes in the sun's photosphere so vast that it is at one time thrown into the most violent convulsions, and at another is calm and placid as a lake without a ripple on its surface. Science has accurately measured the length of the sunspot cycle, but it has not yet succeeded in accounting for the phenomena.

The one circumstance which is mainly relied upon as evidence, namely, that Jupiter's period of revolution is nearly equal to the sunspot cycle, is entirely fatal to the hypothesis. A slight inequality must lead in the end to widest divergence. The sunspots reach their maxima in eleven years and a quarter, as nearly as can be ascertained from present data. There is an occasional irregularity of one or two years in excess or defect; but these, so far as they have been observed, have been taken into account. Further observations, extended over many years, may modify the estimated period slightly, but there is not the smallest probability that it will ever be found to correspond exactly with the time of Jupiter's revolution. ascertained difference between the two periods is about seven months. The sunspots were at their maximum in the autumn of 1859 and about the end of 1870. Jupiter was in perihelion about Christmas, 1856, and about the beginning of November, 1868. The sunspots should again reach their largest development in the spring of 1882: but some mysterious force, or lack of force, in the mighty laboratory of the sun's photosphere has delayed their formation, and the maximum is not expected till the end of that year, or the early part of 1883. The sun is at present passing through "an irregularity in excess" of the usual period, and to this cause we probably owe the severe winter and wet and cold summer of the past year; but 1859 and 1870 were regular periods, and we may rely upon the average of eleven years and a quarter from the latter year, so that the sunspot maxima will gradually fall away from Jupiter's perihelic epoch, till, in a little more than a century there will be a long succession of cycles, extending over about 100 years, in which the sunspots will be at their height when Jupiter is at more than his mean distance from the suft. At present, therefore, we do not see how anything can be laid to the charge of the larger planets, even when in perihelion, and the causes of the disturbances in the sun's photosphere remain unexplained; though we think it more than probable that they are in the sun himself, as we know of no external force which is capable of producing them.

We must now briefly notice the popular, or empiric

mode of dealing with the approaching perihelia. Anything of rare occurrence amongst the celestial spheres not only awakens a lively interest, but gives birth to widespread fears. Jupiter is undoubtedly the most potent of the planets, but as he has a cycle of less than twelve years, he is allowed under ordinary circumstances to come and go unquestioned. Saturn, the next in size, has a period of less than thirty years, and he also is allowed to pass unchallenged. Their perihelia are nearly concurrent for long periods, at intervals of about sixty years; but they have not hitherto been suspected of causing widespread calamities in our world; and but for the fact that they are about to pass through their perihelia in rather close companionship with the Arctic wanderers, we should probably never have heard that the next decade is likely to prove disastrous to mankind. Dr. Knapp, of the United States, however, has collected and published a mass of statistical information intended to show that perihelic periods are always seasons of unusual mortality. He believes that the perihelia of the larger planets occasion atmospheric conditions unfavourable to life, and therefore that pestilential seasons should occur once in a dozen years, and aggravated and more widespread epidemics at longer intervals, corresponding with the dates of concurrent perihelia. researches have extended over the past two thousand years, and the result is said to be invariable! The Pall Mall Gazette of March 6th, 1879, also contains a letter from Professor B. G. Jenkins, F.R.A.S., in which he says:

"Within the next seven years there will happen that which has not happened ... r hundreds (!) of years—all the planets at or near their nearest point to the sun about the same time. It is true of the earth that its magnetic intensity is greater about the time when it is near the sun. The same is probably true of all the planets. Therefore we may expect extraordinary magnetic phenomena during the next seven years; and great plagues, which will manifest themselves in all their intensity, when Jupiter is about three years from [past] his perihelion—that is in 1883."

Dr. Knapp's theory was ably combated on purely scientific grounds in a short article by Professor Colbert, which appeared in the June number of Our Rest, a Chicago monthly paper; and the editor states that "Professor Watson, of Ann Harbour, Professor W. Harkness, of Washington, and other well-known astronomers, who have

been appealed to, uniformly express a similar opinion to that of Professor Colbert." We are glad also to add that the Astronomer Royal for Scotland, in a letter to the writer, states that the uneasiness caused by Dr. Knapp's book, both in England and America, is "foundationless." It is clear, therefore, that our astronomers have no misgivings as to the effect of the approaching perihelia; but as Dr. Knapp's theory has not yet, as far as we know, been submitted to the test of fact, we propose to follow in his track a very little way, and at the same time to afford facilities to those who think it worth while to pursue the subject further.

The following table shows all the perihelia through which the four larger planets have passed, separately or in conjunction, since the commencement of the Christian era, to which we have added the estimated periods of sunspot maxima. For convenience of reference we have divided

them into centuries:

NINETEENTH CENTURY.												
Sunspot Max.	1882		1659	1848	1837	1826	1814	1803				
Jupiter Peri.	1860	1868	1856	1842	1833	1821	1809					
Saturn PerL	1885		1856		1826							
Uranus Peri.	1882											
Neptune Peri.	1882											
EIGHTEENTH CENTURY.												
Supepot Max.	1792	1781	1769	1758	1747	1736	1724	1713	1702			
Jupiter Peri.	1797	1785	1773	1762	1750	1738	1726	1714	1702			
Saturn Peri.	1797			1767		1738		1708				
Uranus Perl.	1798							1714				
Neptune Peri.								1717				
SEVENTEENTH CENTURY.												
Sunspot Max.	1691	1679	1668	1657	1646	1634	1623	1612	1601			
Jupiter Peri.	1690	1679	1667	1655	1643	1631	1619	1607	1001			
Seturn Perl.	1050	1679	100.	1649	1010	1001	1620	1001				
Uranus Peri.		20.0		20.0		1 63 0	1020					
		SLX	TRENT	H CEN	TURY.							
Sunspot Max.	1589	1578	1567	1556	1544	1533	1522	1511				
Jupiter Peri.	1595	1584	1572	1560	1548	1536	1524	1512	1501			
Saturn Peri.	1590	1001	1012	1561	1010	1532	1021	1012	1502			
Uranus Peri.	1000			2001	1546	1005						
Neptane Perl.					1553							
		_		_								
		Fir	TEENT	H CEN	TURY.							
Sunspot Max.	1499	1488	1477	1466	1454	1443	1432	1421	1409			
Jupiter Peri.		1489	1477	1465	1453	1441	1429	1418	1406			
Saturn Peri.			1473			1449		1414				
Uranus Peri,				1462								

FOURTEENTH CENTURY.

Sunspot Max. 1398 Jupiter Peri. 1394 Saturn Peri. Uranus Peri. Neptune Peri.	1387 1382 1384 1388	1376 1370 1378	1364 1358 1355	1353 1 346	1342 1335	1331 1323 1325	1319 1311	1308
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THIRTEENTH CENTURY.

Sunspot Max. Jupiter Peri. Saturn Peri. Uranus Peri.	1 299 129 6				
Neptune Peri.				1223	

TWELFTH CENTURY.

Sunspot Max.	1196	1184	1173	1162	1151	1139	1128	1117	1106
Jupiter Peri.		1180			1145		1121		
Saturn Peri.		1178			1148		1119		
Timpue Peri							1125		

ELEVENTH CENTURY.

Sunspot Max.	1094	1083	1072	1061	1049	1038	1027	1016	1004
Jupiter Peri.									
Saturn Peri.		1089		1060			1031		1001
Uranus Peri.						1041			
Nontuna Pari				1030					

TENTH CENTURY.

Sunspot Max.	993	982	971	959	948	937	926	914	903
Jupiter Peri.	990	979	967	955	943	931	919	907	
Saturn Peri.		972			942			913	
Uranus Peri.				958					

NINTH CENTURY.

Sunspot Max.	892	881	869	858	847	836	824	813	802
Jupiter Peri.	896	884	872	860	848	836	824	813	801
Saturn Peri.		883		854			824		
Uranus Peri.			873						
Neptune Peri.	894								

EIGHTH CENTURY.

Sunspot Max.	791	779	768	757	746	734	723	712	701
Jupiter Peri.	789	777	765	753	741	729	718	706	-
Saturn Peri.	795		765			786	•	706	
Uranus Peri.	789							705	
Neptane Peri.						730			

SEVENTH CENTURY.

Sunspot Max.	689	678	667	65 6	644	638	622	611
Jupiter Peri.	694	682	670	658	646	685	623	612
Saturn Peri.			677		647		618	
Umana Peri.							621	

		BIXT	ти Св	NTUE	T.				
Sunspot Max. Jupiter Peri. Saturn Peri. Uranus Peri. Neptune Peri.	599 599	588 587 588	5 77 5 75	566 563 565	554 552 559	543 540 537	582 528 630	520 516	509 504
		Fre	ен Сі	en t iti	XY.				
Sunspot Max. Jupiter Peri. Saturn Peri. Uranus Peri.	498 492 500	487 480	475 469 471	464 457 453	453 445 441	442 433	430 421	419 409 413	408
		Ропъ	тн С	ENTU	RY.				
Sunspot Max. Jupiter Peri.	397 397	385 385	374 374	363 362	352 350	340 338	329 326	318 314	307 302
Saturn Peri. Uranus Peri.		382	869		353		323		
Neptune Peri.	400								
		THE	RD C	NTU.	T.				
Sunspot Max. Jupiter Perl. Saturn Perl.	295 291 294	284 279	273 267 264	262 255	250 243	239 231 235	228 219	217 208 205	205
Uranus Peri.		285						201	
Neptune Peri.						236			
		SECO	ND C	ENTU	RY.				
Sunspot Max.	194	183	173	160	149	138	127	115	104
Jupiter Peri.	196	184	172	160	148	136	124	113	101
Saturn Peri.			176		146			117	
Uranus Peri.								117	
		Fre	er Cz	NTUR	Y.				
Sunspot Max.	93	82	70	59	48	37	25	14	8
Juniter Peri.	89	77	65	53	41	30	18	6	
Saturn Peri.	87			58		29			
Uranus Peri.						33			
Neptune Peri.			71						

Of the foregoing, twenty-four were double perihelia, namely, twelve of Jupiter and Saturn, six of Jupiter and Uranus, four of Jupiter and Neptune, and two of Saturn and Uranus; and in four instances three of the larger planets passed through their perihelia very nearly together, namely, Jupiter, Saturn, and Uranus in 705-7 and 1797-8; Jupiter, Saturn, and Neptune in 1058-62; and Jupiter, Uranus, and Neptune in 1714-17. It thus appears that there have been above 250 perihelic periods during the Christian era; and in applying the dates of them to terrestrial phenomena, of course each perihelion

would be made to cover one or two years before and after its occurrence, so that the nineteen centuries are overspread with a network of perihelia through the meshes of which it would be difficult for any pestilence to escape; and as malignant diseases are always present in the world, and very often assume epidemic forms and spread themselves over wide areas, it would be very surprising if perihelia and pestilence were not frequently coincident in time, though there is not the smallest evidence that there is any other connection between them. There are two things, however, which must strike any one who examines the foregoing tables, and who has a fair knowledge of the epidemic visitations of the past,—first, that there have been terrible pestilences when none of the larger planets were in perihelion; and, secondly, that there have been very remarkable perihelic conjunctions at times when there was nothing abnormal in the sanitary condition of our planet. With a few illustrations of each of these points we must bring our remarks to a close. If Dr. Knapp's theory had been true, the last century would have been marked by two of the most terrible pestilential visitations which have occurred during the Christian era, namely, about the years 1714-17 and 1797-8; and similar widespread and desolating epidemics must have been experienced in 706-7, and 1058-62; that is at the time when three of the larger planets were in perihelion nearly together; but it is very well known that these were not periods of exceptional mortality. Again, going no further than the present century. Jupiter was in perihelion in 1809, 1821, 1833, 1845, 1856, and 1868; and Saturn in 1826 and 1856; and the perihelia of the two were nearly concurrent in 1856. All these should have been very pestilential years; but "the oldest inhabitant," in looking back upon the last seventy years, would not be likely to fix upon any one of them as being specially remarkable for epidemic visitations. His mind would revert at once to the cholera years, 1832, 1848-9, 1853, and 1862. pox also prevailed epidemically in 1816-18, and again in 1825; but none of the larger planets was near its perihelion in any of these years, except that Saturn's perihelion occurred a year after the last-named date. must now notice a few of the worst epidemic visitations of the Christian era, and see where the larger planets were at the time.

Gibbon gives an account of a terrible pestilence which "from the year 250 to 265 A.D. raged without interruption in every province, every city, and almost every family in the Roman Empire. During some time 5,000 persons died daily in Rome, and many towns that had escaped the hands of the barbarians were entirely depopulated."* Where were the planets during this awful visitation? Jupiter must of course pass through perihelion at least once in fifteen years, which he did in 255, but he was in aphelion when the pestilence commenced; and Saturn was "in at the death" of the epidemic itself in 265; whilst Uranus and Neptune were busy with their own affairs and left the Roman Empire to its fate. In 1348, and again in 1360, the "Black Death" devastated Europe. It is true that Jupiter was in perihelion in 1346 and 1358; but Saturn was seven years from his perihelion at the commencement of the pestilence; and the other two were far away. To support Dr. Knapp's theory, there ought to have been at least three of the larger planets concerned in it, as it is described as "a convulsion of the human race unequalled in violence and extent." There was certainly nothing to compare with it in 1714-7 and 1797-8. In 1485 the "Sweating Sickness" broke out in England; and at the same time all Europe was scourged by Plague, putrid fever, and various other pestilential diseases. It reappeared in 1506, and Southern and Central Europe were also devastated that year by spotted typhus, bubo plague, and influenza. It also broke out afresh in 1517 and 1528, and in the latter year its ravages were so terrible that it was called "the Great Mortality." Where were the larger planets? In all the years named every one of them was nearer to aphelion than perihelion. They certainly had nothing to do with the Sweating Sickness. This scourge was followed by the Plague, the visitations of which occurred in the years 1593, 1605, 1625, 1636, and 1665. Where were the larger planets? With the exception of Saturn in 1591 and Jupiter in 1667, they were all in very distant regions; and if they had had a wholesome dread of transferring the Plague to their own spheres they could hardly have abstained more scrupulously from all interference with mundane matters!

The above-named pestilences were unquestionably the

^{*} Decline and Fall, Vol. L, p. 159.

worst which have happened during the Christian era: and the evidence which they afford of the unsoundness of Dr. Knapp's theory is so overwhelming that we should be tempted, if our space permitted, to convert our argument into a reductio ad absurdum by proving that the larger planets when in perihelion are benignant in their aspects: that the increased magnetic intensity, however small, which results from their nearer presence, is salubrious and conducive to prolonged life; and that it is their aphelia that we have to dread! We are content, however, with the demonstration of the fact that experience confirms the deductions of science, and that there is not the slightest reason to apprehend that any disturbance of the physical condition of our world will be caused by the perihelia of the planets Jupiter, Saturn, Uranus, and Neptune in the vears 1880-85.

ART. III.—Religious Liberty in Europe at the Present Time, Especially in Austria and Germany.* By JAMES H. Riog, D.D.

The current ideas of European thought as to religious liberty would seem to be very advanced, and yet as a matter of fact religious liberty in any sense or to any extent conformable with those ideas is as yet practically little known in Europe. It is customary to speak of Luther and the Reformation as having secured freedom of conscience, and of religious profession and worship, for the modern world; and yet, till within a few years past, no such freedom of conscience, no such general liberty of religious profession and worship, has been known in any part of Luther's own land; and even to-day, in not a few German or German-speaking countries, religious liberty, in any just or full sense, is altogether unknown.

In Bavaria, in Mecklenberg, and in all the provinces of Austria, there is very little, if any, more religious liberty to-day than there was in Tuscany before the freedom of

Italy was achieved.

This seems exceedingly strange to us, and is indeed irreconcilable with a certain amount of tall talk that has prevailed in regard to the influence everywhere of the Protestant faith and profession; but it will seem less amazing if we remember the history of our own country. Only half a century has passed away since the repeal of the Test and Corporation Acts. Since that period some other relics of religious oppression have been removed, and even yet it is held by many that the work is hardly quite complete. In America, too, although the whole growth of the laws and liberties of the great federated republic has taken place long since the days of Luther, yet new forms of State and Church despotism sprang up in the different States, of which the last relics in some have not been done away much longer than our own Test and Corpora-

Being the substance of an address on The Present State of Religious Liberty in Europe, delivered at the Anglo-American Section of the Conference of the Evangelical Alliance held in Basle during the first week of September, 1879.

tion Acts. In some countries, indeed, liberty in all its breadth and depth has found a more congenial rooting and a more friendly soil than elsewhere. In some countries liberty has been the natural growth even when tyranny was established as the legal rule, whereas in others there seems to be no such natural congeniality between true liberty of soul and the national character. In countries of this latter sort, religious liberty finds more difficult entrance and is of slower growth; whereas in countries of the other sort, liberty has taken hold of the people and their sympathies from the earliest periods, and has held fast hold, in spite of legal tyranny and active religious persecution. Such a country England would seem to have In the worst times of religious tyranny in England, religious liberty had a strong hold of the heart of the people, and it was found impossible to root out the life of free religious thought and worship.

It would seem to be impossible to account for such differences as it were in the soil of various nationalities; but the principles of religious liberty in England may be traced back to a very early period. Three years before the close of the sixth century, that is to say in the year 597, our English king, Ethelbert, in his answer to Augustine, the missionary from Rome to this island, gave utterance to the principles of religious liberty in a remarkably fine and generous vein. His words are said to have been as

"Your words are fair and your promises—but because they are new and doubtful, I cannot give my assent to them and leave the customs which I have so long observed with the whole Anglo-Saxon race. But because you have come hither as strangers from a long distance, and as I seem myself to have seen clearly that what you yourselves believe to be true and good, you wish to impart to us, we do not wish to molest you; nay rather, we are anxious to receive you hospitably, and to give you all that is needed for your support; nor do we hinder you from joining all you can to the faith of your religion."

follows:

The spirit of these words is the true spirit of generous respect for the views and convictions of other men, especially in matters of religion. So early had that spirit taken hold of the best and noblest minds in England. Nor has it ever been dislodged. In spite of prelate, of pope, of king, it held its sway in the deepest convictions of the nation; nor in the most trying and unhappy times were

there wanting men of noble rank and of nobler character to sustain the strife and conflict on behalf of liberty, in the large sense of which I have spoken. The succession of freedom was thus preserved from generation to generation; and the final victory, slow as it may appear so far as respects the ultimate attainment of the perfect forms of liberty, was but the crown of a conflict which had been maintained, with varying fortunes indeed, but never without heart or hope, for a thousand years. The victory which has thus been won in English lands, on both sides of the Atlantic, cannot be much longer postponed in Austria or Bavaria, when Spain and Portugal have set them the example, and when Italy from end to end is rejoicing in the free air of perfect religious liberty. The Teutonic lands of Central Europe must all of them before long be delivered from an untimely and unseemly tyranny, exercised upon the conscience and the religious life of the people.

A glance at the condition of some of the surrounding countries may fitly precede what is to be said as to Austria and Germany. Of Holland there is no need to speak. That small but famous land was the preceptress of the world in regard to this matter of religious liberty. conditions, doubtless, were altogether favourable; the problem was comparatively simple; the population consisted mainly of one class, and that the class most likely to desire and appreciate religious liberty; the difficulties raised by the bigotry and tyranny of great dignitaries, magnates at once of Church and State, were almost wanting. In such a commonwealth religious liberty could be more easily established than elsewhere. There, at any rate, it was established; and in that school of freedom, not only William of Orange, but the statesmen of England learnt its true principles for the benefit of our own land.

The case of Belgium would seem to be unique. It is almost wholly a Roman Catholic kingdom. There are five millions of Romanists, and only some 14,000 Protestants. Nevertheless, in that Roman Catholic land there is said to be complete religious liberty. It may perhaps be thought that if Protestantism were more powerful it would be less readily tolerated, that its insignificance secures its immunity; or it may be that the keen and advanced Liberals, the political Liberals of Belgium, men for the most partwithout a creed, insist on maintaining the principle of

religious liberty as their own best safeguard and insurance, in respect of their political arguments and speculations, against the intolerance of their Jesuit antagonists. Or, again, it may be that having on the one side France with its demands and ideas of religious freedom so long current although as yet so little realised, and having on the other side Holland with its stable liberty so long achieved, so firmly maintained, so fully enjoyed,—Belgium, Catholic as she is, nevertheless accepts, and cannot but accept, the profession and the theory of religious liberty.

Account for it as we may, the fact is as has been stated, and it is a noteworthy fact indeed. In Roman Catholic Belgium, consciences are free; in Austria and in too many countries of Germany, including some that are mainly Protestant, consciences are bound and enslaved.

As to France there is little to say, because the conditions

of that country are so well known.

The French Revolution filled Europe with the ideas and the energies of new life and of daring liberty, filled France itself for some years with unbelief and terrible license license quenched from time to time in cruel tyranny and deluges of blood, and then let loose afresh to be punished, subdued, suppressed again, and finally to be controlled by one great master hand. That outburst of license, unrestrained by faith or reverence, has from that time to the present rendered stable constitutional freedom all but an impossibility for France, especially in matters of religion. Now, indeed, it would appear as if the Republic had almost learned the lessons of constitutional liberty and government; but the well-known 7th clause of the Ferry Bill, relating to education by religious societies, would seem to prove that, after all, some of the leading statesmen of France have not even yet mastered the principles and conditions of true freedom, civil any more than religious; for complete religious liberty must ever be included in civil liberty. rightly understood and fully conceded. The clause in question violates the essential rights of religious communities established on a voluntary basis and wholly selfsupported. It places an instrument of oppression in the hands of the Government, and what is more, it is almost certain to produce a reaction in favour of the Jesuits and the religious orders of Roman Catholicism generally.

Notwithstanding, however, the error that seems to

have been committed in the case of the Ferry Bill. there is abundant evidence from many quarters that religious liberty in France is, on the whole, in a more hopeful condition than at any previous time. Free scope is allowed to various evangelical agencies in their homeliest forms of religious activity. Religious meetings are held in many parts of Paris and in others of the largest cities of France, not only under the direction of the excellent Mr. McCall, but by the Methodists, and some other religious communions; and what is much more, there is a widespread and an unmistakable readiness on the part of large numbers of the population to receive religious instruction, and to respond to religious influences and appeals. Still at present whatever liberty may be enjoyed is too largely a matter of police administration and favour; the rights of religious liberty are not yet conceded.

The case of Italy is a very remarkable contrast to that of France. No grand revolutionary era filled Italy ninety years ago, or at any period since, with a flood of modern ideas and of fiery energies. The emancipation of Italy was effected piecemeal, and the process has been completed within the period of the generation now drawing to a close.

And yet whilst France, the land of the Revolution, has never gained liberty for herself, in Italy liberty reigns complete. One reason of this may perhaps be that while in France the Revolution, which seemed to introduce an era of liberty, did in fact let loose a chaotic tempest of horrors and orgies, and so identified the name of liberty with the memory of all that is most hateful and most terrible,—with the destruction, in fact, of all that is truly called liberty, and with the unbridled indulgence of every lust and passion,—on the other hand, in Italy, the successive revolutions that came to the different states brought with them genuine freedom and all the blessings which accompany freedom, the recovery of long-lost privileges, the realisation of hopes immemorially cherished. The name of liberty accordingly in Italy will blanch no cheek with terror, will make no citizen quake for his property, or his family, or his country. Another reason may be that whereas in France the complete centralisation of government and of administration places in the hands of the Government for the time being an instrumentality equally

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potent and tempting, wherewith to influence, to direct, if need be to coerce, the whole population of the country; in Italy, made up as it has been of many different states and principalities, each with its own centre, and each centre with its own ancient name and fame and traditions, no such centralisation as that of France is in the least degree practicable. No Government, accordingly, could exercise, if it would, any such control over the people as that which from the one Government centre is exercised in France. And still another reason may possibly be found in this further consideration. Italy was for some centuries the country of great and famous self-governing cities and commonwealths. Of those days of glory the traditions have been maintained in the various cities and countries where selfgovernment, and renown both of arms and of policy, so long flourished. Liberty, in its modern forms, cannot but be congenial to the cherished traditions of the fair lands and of the famous cities where such glories of dominion and statesmanship, of freedom and power, at one time excited the admiration of the world.

Whatever the reasons may be, the fact is clear and certain. In no country in the world is there more perfect, more absolute religious liberty than in Italy. In their evangelical operations the various religious communities of the reformed faith, whether native to the country, or introduced from other lands, are altogether unfettered; they move and work as free as air. As yet, indeed, the number of adherents belonging to the various evangelical communities is altogether inconsiderable. Out of twentyfive millions of people, it is safe to say that there are nothing like 20,000 evangelical professors of all communions. This, however, will surprise no one who considers how few years have passed away since any and every form of profession outside of the Catholic Church was proscribed—was impossible in Italy. The successes of the Wesleyan Missions at Naples and Spezia are not a little remarkable. There is already a promising growth of native ministers; there is already a native Methodist church rooted and growing in the country. Two stations have been mentioned, but there are not a few besides where the work seems to be hopeful. An important establishment has been founded in Rome, and although the number of adherents is as yet small, the influence of the organisation is very considerable.

From Italy let us turn to the Iberian Peninsula. It has already been intimated that in Spain at the present time a liberty exists of religious profession and worship altogether, unknown in Austria and in several states of the German Empire. When, in the autumn of 1865, Queen Isabel the Second was driven out of Spain, one of the earliest demands which followed the proclamation of the Republic was a demand for liberty of worship. In May, 1869, accordingly, the Cortes enacted a decree to that effect, and from that period to 1875, religious activities in connection with all professions of faith were freely carried

on in Spain.

Notwithstanding the jealousy and antagonism of the priests, the results in some cases were very striking, and revealed a condition of religious impressibility and a spirit of inquiry among the population of Spain, especially in the South, and, it may be added, in the Balearic Isles, the existence of which had been suspected by very few, and indeed the possibility of which had been confidently denied beforehand by newspaper correspondents of the very highest pretensions. In 1875, however, the monarchy was restored, and, as was to be expected, some reaction took place. It was necessary to frame a new constitution; and after sharp debate in the Cortes, an article relating to liberty of worship was inserted in the constitution, by which it was required that there should be no public manifestation of any religion other than that of the State, namely, the Roman Catholic religion. Subject to this condition a certain liberty of worship was allowed; but such a condition could not fail to lead to controversy and embarrassment. In fact, in September, 1876, a new subgovernor in Minorca undertook to disperse a Methodist congregation assembling for worship at Port Mahon. Lord Derby, then at the Foreign Office, being appealed to in the case, immediately communicated with Her Majesty's Minister at Madrid, who made representations on the subject to the Spanish Government. The result has been the establishment of rules of procedure in the administration of the law, which practically allow a fair amount of liberty of worship, although it is of course unsatisfactory that such liberty should depend upon police administration guided by Government instructions. The rule of procedure is as follows:

[&]quot;Where churches exist exclusively devoted to public worship,

the authorities shall not place the slightest restriction on such worship, saving the general measures of police and public order; and where no such church exists, one special room in the same building shall be devoted to public worship and another for teaching, the latter alone being subject to the inspection of the authorities; and finally, where such appropriation is impossible the minister, of whatever religion he may be, shall, if he can only provide one room, designate beforehand which hours are devoted to worship and which to teaching. The building to be scrupulously respected by the authorities during the former."

Under the protection of these not unreasonable regulations, evangelical activities are freely exercised and carried on in Spain. Such provisions would be welcomed as a large charter of liberty by oppressed Dissenters in Austria.

In Portugal, also, the conditions under which religious worship may be celebrated, and religious operations carried on, have for some time past been fairly favourable. The progress made during the last twelve years has been very great. About twelve years ago—we quote now from a letter in the Watchman newspaper of September 3rd, written by the venerable Dr. Rule, so long known as a labourer in and for Spain, both by preaching and by pen:

"About twelve years ago," says Dr. Rule, "an honoured friend of my own, Don Angel Herreros de Mora, whom the now defunct tribunal of the faith had cast into a filthy dungeon in Madrid, in 1856, went over to Lisbon — not daring to enter Spain again—and there entered into a course of arduous labour, encountering persecution with violence, often suffering hunger, until he established a congregation. There he obtained the sanction of Government, received the adherence of some priests, but at last, exhausted by the sore trials of many years, he prematurely departed this life, and his remains were followed to the grave by a crowd of true mourners, among whom were the principal English and Americans, official and commercial.

"It was De Mora, himself an ex-priest and recognised Presbyter in the Protestant Episcopal Church of America, who held the first communion service in Mr. Cassel's house, near Villa Nova, on the Douro, soon after his arrival, with Portuguese communicants, where now resides Padre Guilherme Dias, an ex-priest and assistant Portuguese minister of our own [that is of the

Methodist | communion.

"It was on November 28th, 1878, that the King of Portugal gave his sign manual, followed by the signatures of all his ministers, to a decree for the civil registration of Protestants, which came into effect on the first day of this year. The decree

is prefaced by a memorial from the Secretary of State for Eccle siastical Affairs and Justice, which shows that the present Act originated in a desire for religious liberty, which found expression in Parliament nearly sixty years ago, and gave rise to a succession of administrative laws; and that nothing prevented the legal establishment of such liberty but conflict between the civil and ecclesiastical authorities. Since, however, dissidents from the Church of Rome have so multiplied that their claims cannot any longer be ignored, full provision is made for registering the births, deaths, and marriages of non-Catholics, as they please to call us, and for supplying the defect of recognition in times past. All of these, whether natives or foreigners, who accept registration, now enjoy all civil rights, and are freed from penalty or disability on account of religion. Our ministers are empowered by law to act freely; they certify the funerals of members of their congregations. and receive municipal authority for the interment of their dead, just as do the priests for theirs. Humiliating distinctions are at an end, and thus we are at home in Portugal. So far as the law goes, our marriages are civil, but whatever others may choose to prefer no doubt the civil contract will always by us be followed instantly by the sacred rite. In the eye of the law, both in Spain and Portugal, our religion is inviolably sacred."

From Spain and Portugal let us now turn to Germany and Austria. It is impossible to understand the question of religious liberty for these empires without going back to the settlement of 1648, which remained substantially unaltered for two centuries. The year 1648 saw the close of the Thirty Years' War. The Treaty of Westphalia brought that cruel conflict to an end. By that treaty it was agreed and determined that the different rival Churches should permanently retain the positions they had made good respectively in the year 1624. It will be remembered that the conflict had been between the Protestants on the one hand, including both the Lutheran and the Reformed Churches, and the Roman Catholics on the other. fearful struggle had taught the Roman Catholics that they could not coerce the Protestants, and the Protestants that they could not establish any conclusive ascendency over the Roman Catholics. It had also taught the Lutheran and the Reformed Churches to suppress their mutual animosities and to respect each other's rights. agreement accordingly was, as above stated, that the respective Churches should be upheld in the position which each of them had gained in 1624, no other congregations or religious organisations being recognised except

those which already existed. Whilst, however, such terms of mutual tolerance and respect were legally established for these three connections, no other communions were allowed any place or any rights whatever. It was required that every child should be baptised in the faith professed by his parents, and should be duly confirmed at the proper age. Unless so baptised and confirmed he could have no civil rights, nor could he be apprenticed to any craft, or enrolled in any guild. Proselytism from one faith to another was forbidden, although it was provided that a man might, if he so determined, being of full age, change his religious profession by assuming that of either of the other established creeds. The king or prince ruling the country was constituted head of the Protestant Church or Churches in that country, or, to use the technical expression, held the position of summus episcopus. No such ecclesiastical position in respect to the Church of Rome was conferred on the king or prince. The rights of the See of Rome were so far restricted only as the obligations of mutual toleration and respect for the three Churches agreed on in the treaty implied some restriction. This settlement remained substantially unaltered, as it has been said, for 200 years. Here and there an exception might be made in favour of the Jews, but no exception was made in favour of any Protestant sect, and Baptists in particular were persecuted with a bitterness and pertinacity worthy of the Church of Rome. More than twenty years ago, at the time of the Berlin Conference of the Evangelical Alliance in 1857, the case of persecuted Baptists in different parts of Germany occupied the attention of the Alliance, and was brought under the notice of the liberally-disposed King Frederick William IV., whose influence was exerted both within his own dominions and also in those minor states, such especially as Mecklenberg and the Hessian principalities, where the Baptists were the object of relentless persecution. But though the king's influence was powerful, and mitigations were obtained, there was for some years no effectual change of the law in favour of Dissenters. It is true that in 1848, when the revolutionary tide-wave swept over Europe, one of the first demands made on behalf of the German people had been for liberty of faith and worship; and it is true, furthermore, that in 1850 Articles were introduced into the Prussian Constitution laying down the most thoroughgoing principles of

religious liberty. Notwithstanding, however, these provisions, religious liberty was no more practically the law of Prussia after 1850 than it was before. The adoption of a Constitution cannot at once either repeal or remould the legislation of centuries. The Treaty of Westphalia was still in force. Each protected Church could demand to have the provisions of that treaty carried into effect against any who, being Dissenters, by holding religious meetings, by admitting any stranger to family worship, by attempting to proselytise, or in any other way, contravened their guaranteed rights. The clergy, moreover, the landowners. the magistracy, and the police authorities were usually agreed in their opposition to what they regarded as the revolutionary principles of modern religious liberty. It is easy to understand, therefore, how the tenor of the whole stream of German and Prussian legislation in the past, backed by local authority and prejudice, had force to suppress and annul the provisions of the new Constitution. In the Eastern provinces of Prussia especially the Baptists were subject to frequent harassing interferences. Passports were refused them by the local authorities, and sometimes fines were inflicted for holding meetings. Among others, the schoolmaster residing at Goyden, in East Prussia, was fined. He petitioned the king to annul his sentence. This His Majesty declared himself unable to do, but he paid the schoolmaster's fine.

If such was the condition of things for many years after 1850 within the dominions of the tolerant and liberal Prussian king, and in spite of the articles of the new Constitution, it will be understood that matters were much worse in such high Lutheran principalities—bigoted often in proportion to their pettiness—as Mecklenberg-Schwerin and Hanover, as Hessen-Cassel and Hessen-Darmstadt, and others of various grades of insignificance, down to the paltry principality of Schaumborg-Liope. Altogether, over a large section of Germany, especially Lutheran Germany, religious oppression reigned unbroken so lately as twenty years ago. Nor was there any effectual change until after the consolidation of the Northern States of Germany in 1866 into what was known as the Northern League or Bund. From that day there has been some advance in religious liberty throughout the whole of the territory included in the Bund. Still more lately by the establishment of the German Empire further progress has

been ensured in the right direction, and, in particular, some of the countries of South Germany have shared in the advance. This has been the case especially in Baden and Würtemberg. Bavaria, however, has certain constitutional rights reserved under the Articles of Union with the Empire, one class of rights reserved being those which relate to matters ecclesiastical. Bavaria accordingly remains virtually where she was placed under the Treaty of

Westphalia, two hundred years ago.

To some of the points now touched reference will need to be made again at a later point in this paper. Austria must now claim our attention before we return to the case of Germany and such countries as are now included in that empire. The remarks made some time ago in reference to the ecclesiastical settlement of 1648 and the general condition of matters ecclesiastical during the following two centuries apply to the provinces of Austria as well as to those of Germany. But whereas Germany on the whole, especially since 1866, has been advancing in the direction of liberty, Austria remains nearly where she was two centuries ago. The basis of settlement for Austria is still the Treaty of Westphalia. The royal indulgence indeed has been extended to the Jews, and recently to the Old Catholics, but as respects Dissenters in general the old laws remain in unmitigated force. There is no shadow of religious liberty for Dissenters. If, indeed, we refer to the Statesman's Year Book we are informed that there is perfect religious liberty in Austria for all sects. statement no doubt is founded upon a phrase which may be found in the new Constitution of the empire; but how absolutely unmeaning and empty as practical guarantees of liberty are such phrases will be evident from the following sommary.

The Austrian Constitution contains verbal provisions to the effect that religious liberty and liberty of conscience is guaranteed, so that every one, from his sixteenth year, may choose his own religion or Church, and may secede from one and join another Church at his own free will without exposing himself to the loss of any of his rights as a citizen; and further, that creed or religion shall not interpose a legal difficulty to impede a State or Government appointment; and, that no one may be disinherited

because of changing his creed.

On paper this may sound well, and liberal; but if we you liv. No. GYIL.

inquire strictly into its meaning, and at the same time take note of the terms and effect of other laws affecting matters religious, we shall easily see how valueless is the so-called guarantee.

1. The Churches acknowledged by law are the Romanist, the Lutheran, the Reformed, and the Mosaisch or Jewish. Also, quite recently a few Old Catholic Societies or Churches

have been recognised.

2. Despite the guaranteed religious liberty, it is a fact that to all Churches outside those above named, i.e., to all voluntary Churches and religious societies, religious liberty is absolutely denied. To members of such voluntary Churches, the only liberty allowed is liberty to pray in private, and with the bond fide members of the family!

3. It is not permitted to any one who is a member of a Church not legally acknowledged in Austria to say to what Church he actually belongs, but if he has occasion to make any declaration before the authorities in which his religion must be mentioned, he is compelled to declare

that he is "Confessionlso."

Under these circumstances evangelical work in Austria is very difficult, and disabilities are almost innumerable. Up to the beginning of 1879 the administration of the law was comparatively lenient, but during the last year it has been severe; and, if the present reactionary policy is to be pursued, it is only a question of time as to the destruction of all voluntary evangelical work. The outlook is very dark. The Constitution, as has been seen, appears to guarantee religious liberty, but this is explained to mean the toleration of the Evangelical (Lutheran) Church side by side with the Romanist. Austria, Bohemia, Moravia, &c., religious liberty is practically unknown. In Hungary, so far as can be learned, matters are a trifle better; but Hungary, it must be remembered, lies outside the territory regulated by the provisions of 1648.

In December, 1878, a gentleman in the neighbourhood of Prague told a friend of the present writer that the most perfect religious liberty existed; but when he was pressed on the subject, he explained himself as meaning that the children of Protestants had full liberty to remain Protestants, and no compulsion, nor indeed any effort, would be used to cause them to "return" to the Romish Church. "Proselytism, however," he added, "would never, could

never, be tolerated. What a man was, he must remain." And these are the prevailing views, as they are indeed the

views embodied in the Treaty of Westphalia.

The results of such an administration of "religious liberty" were brought at length before the late meeting of the Evangelical Alliance at Bâle in the form of petitions or memorials from not a few sufferers for conscience sake belonging to various congregations, and, amongst the rest, to those connected with the American Board of Missions. The substance of some of these memorials has been published in the leading journals of England and in several Continental journals. It has also been arranged that a deputation shall be sent to Vienna on this subject representing different nationalities—especially the English. It is hoped that in this, as in former cases of religious oppression, the efforts of the Alliance will be secured by the powerful influence of Her Majesty's Minister for Foreign Affairs.

It is discouraging to find, notwithstanding all that has been said of late years as to the growing liberality of the Austrian régime, that the Austrian régime still clings to the old ground of intolerance and exclusiveness. It is probable indeed that the reaction is dependent mainly upon political feeling representing the increase of intense conservatism in the country. There would seem to be little reason for supposing that any personal feeling on the part of the Emperor is represented in the present reaction. Probably the reverse is the case. It can hardly be doubted, however, that the feeling of the present administration is represented in the revived intolerance which has been before our view. It may be hoped, notwithstanding, that the public opinion of the highest minds in Europe may be collected and brought to bear upon this question. Then it can hardly be doubted what the result will be. Count Bismarck-Bohlen. a near relative of his famous namesake, was present at Bâle, and even took part in the International Committee before which this question was brought and these instances were canvassed. It is hoped that Germany

⁶ Since the text of this article was written the deputation has visited Vienna. It consisted of Alderman MacArthur, M.P., the Hon. and Rev. E. V. Bligh, and M. Charles Sarasin (Bâle), Colonel Von Buren (Berne), and Pasteur Fisch (Paris). The result has been fair promises and some alleviation. What is wanted is new Statutes.

will combine with England in making representations to

Austria upon this whole subject.

Within the limits of the German Empire itself, however, there are, as has been stated, countries in which religious liberty is scarcely, if at all, further advanced than in Austria. Should Austria give way it will be impossible for Bavaria to hold out. There is little to choose at present between Austria and Bavaria as regards this question. Saxony and some other German principalities, if not quite so backward as the two countries to which we have referred, are yet far behind Prussia, Würtemberg, and Baden in religious liberty.

In Würtemberg and Baden, countries in which the more liberal Protestantism of Switzerland and of the Rhineland has always greatly mitigated the characteristically intolerant tendencies of Lutheranism, religious liberty had already made great advances before the recent consolidation of the German Empire. Bünsen chose Baden, chose the city of Heidelberg, for the place of his retirement. He had great influence with the rulers and with the thinkers of that country, and to him in great part the superior liberality of Baden is due. In this paper the legislation of Würtemberg may be quoted as affording a good example of the forms under which the modern growth of liberal ideas in Southern Germany has expressed itself. The law for securing religious liberality to Dissenters in Würtemberg bears date April 9th, 1872, and is as follows:

"Article I.—The organisation of Religious Societies outside the public corporations acknowledged as Churches by the State, is henceforth not dependent (ubhängig) on Government sanction.

"Such Societies enjoy the right of mutual religious exercise in domestic and public worship, as well as in the ordering and

management of their own affairs.

"Always providing that neither their creed (Bekenntniss), their constitution, nor their practices are at variance with the laws of

morality, or the requirements of public order.

"Article II.—Whether, and under what conditions, members of such Religious Societies may be permitted to substitute any other Form of Declaration for the prescribed Form of Oath, is reserved as subject for further prescription.

"All Enactments and Regulations at variance with the above

Decree are hereby annulled."

As the existing condition of things in Austria still represents the religious bondage of past centuries, so the law

just cited, and which is legally carried out in Würtemberg, represents the highest tide-mark of advance as yet attained in the progress of religious liberty in Germany. What is required is that Austria should without loss of time traverse the distance thus indicated, and take her place along the front line of free countries in Europe. Bavaria, as it has been said, possesses reserved rights in matters of ecclesiastical law and administration. Her Constitution is guaranteed, and the condition of things, as might be anticipated, nearly resembles that which obtains in the neighbouring country The ruling family, indeed, of Bavaria, have of Austria. for generations been liberally disposed in matters of religion. Some of them, in particular the late queen, who was a daughter of the pious and lovely Princess Marianne of Prussia, and nearly related to the Prince Waldemar, who so distinguished himself as a volunteer under the eve of Lord Hardinge in the Punjab, have been Christians eminent for goodness and nobleness of character. Nevertheless, the reactionary tendencies of the time are powerful enough not only to prevent the repeal of the old laws of proscription and penalty, but to maintain their active administration in the country. The Constitution, as in the case of Austria, provides for religious liberty in name, but it is religious liberty which includes no freedom of worship (cultusfreiheit), such freedom being indeed distinctly forbidden by law. Nothing beyond family worship, including only the bona fide members of the family, is permitted in Bayaria any more than in Austria. In case a number of individuals, or of families, wish to unite for public worship, they must obtain a royal rescript, which is not an easy matter, though in some instances such permission has been granted for the benefit of settled clusters of families professing a common faith. In the interpretation and administration of the law the authorities for the most part strive to be liberal, but the extent of indulgence allowed seldom, if ever, exceeds the liberty of delivering simple religious addresses or lectures devoid of all cultusform, that is to say, without public prayer or singing. The administration of the sacraments, religious instruction of the young, as, for example, in Sunday schools, public prayer, and singing, are regarded as the exclusive prerogative of the clergy of the authorised Churches. Such is the condition of things in Bavaria, which is predominantly a Catholic State. In some of the smaller and

purely Lutheran principalities of the German Empire, as in Mecklenberg, the condition of things is much the same. In Saxony, which is a Lutheran kingdom, governed by a Catholic royal family, there is somewhat more elasticity and liberality than in Bavaria or Mecklenberg, but not much more. In that kingdom voluntary churches or societies may be established, but only on condition that any such church or society already possesses in itself the element of vitality, an adequate self-sustaining power. Liberty to propagate the doctrines of such a society is not granted. None but Dissenters, or actual and bond fide seceders from the Siate Church, may attend the meetings

of any such church or society.

Prussia, whilst largely Lutheran, and containing within itself accordingly powerful elements of intolerance, contains also a large and active population, impregnated not only with the comparatively liberal ideas of the Reformed Church, but with the energies of active Christian life. In Westphalia, and especially in the valley of the Wüpperthal, vital and active religion flourishes perhaps as nowhere else in Germany. Prussia also, as the most progressive power in Germany, has naturally been more open than any other power to the influences of modern thought. The late king, furthermore, Frederick William IV., was a man not only of religious character, but of generous sympathies. Prussia, accordingly, has yielded to the demands of religious liberty and life more readily, and more liberally, than most of the Germanic States. In that country, as in Baden and in Würtemberg, religious worship is free, the only condition required being that twenty-four hours' notice should have been previously given to the police authorities.

Reference has been made to the era of the Confederation of the Northern German States, that is to 1866, as the point from which a decided movement in favour of religious liberty in Germany must be dated. A few notes will show what have been some of the stages of that movement, and that even such backward States as Mecklenberg have not been altogether unaffected by this advance. They will also serve to show that the bondage which previously encompassed and enwrapped the whole social condition of Germany was even more penetrating and more complete than has been indicated in the foregoing pages.

The first movement in advance is indicated by a decree

dated November 1st, 1867, and which relates to what is designated Freizügigkeit, that is, the right to remove from once place to another. The decree provides that every citizen (Bundes-angehöriger) has the right to sojourn or to settle in any part of the empire (Bundesgebeit) where he is able to secure for himself a dwelling and a maintenance. It further enacts that he is permitted in any part of the empire to acquire landed property. By a third article it provides that he may pursue any trade or calling in any place where he may sojourn or settle, subject only to the same municipal regulations as the citizens of the place: and, furthermore, this law specially provides that no German citizen shall on account of his creed or religion be prevented from either sojourning, or settling, or pursuing any trade or calling in any place he may choose.

The second stage of advance may be traced in the Reichstags-session of the North-German Bund in 1869. A law was passed in that session to secure equal rights to all citizens, whatever their religious opinions might be. Thereby existing legislative restrictions and disabilities arising out of creed or religious confession (Glaubensbekenntniss) were abolished, especially such restrictions as affected participation in municipal or parliamentary representations; and eligibility for official or State appointments was declared to be independent of and unaffected by con-

fession or creed.

The third step in advance now to be noted was the Reichsgesetz of June 5th, 1870, originally made for the North German Bund, but later extended to Würtemberg and the Grand Duchy of Baden, and published in Würtemberg as imperial law on 1st January, 1873, by which the system of poor relief was changed, and the administration thereof entrusted to the municipal (politische), instead of, as formerly, exclusively to the ecclesiastical authorities.

Lastly, by the imperial law of February 6th, 1875, the official registration of births, deaths, and marriages, was taken out of the hands of the clergy, and committed to civil officers specially appointed. The clergy and all ministers of religion are declared disqualified to act as registrars, or as deputy-registrars. By this law both baptism and the religious ceremony in marriage become completely voluntary instead of compulsory, as was before the case, whereas civil marriage is made universally obligatory. In some of these steps, including the last, Austria has followed the

example of Germany. These provisions, however, collectively, do but constitute a basis on which true religiu s freedom, including the freedom of teaching and worship, may be erected. How variously the different States of Germany have respectively made progress beyond the mark thus indicated, will be understood in some measure from the preceding statements of this paper. It is evident that the final triumph of religious liberty in Europe must depend on the course taken, upon the progress made, in Germany and in Austria. In Switzerland, that land of liberty, religious freedom is not yet complete, at all events administratively, in the Cantons. In Scandinavia religious bigotry yet holds its ground, supported mainly, it is said, by the intolerance of the peasantry, who are there a weighty political power.

Russia belongs, as it were, to another hemisphere, and we must await the hour for its enfranchisement. Greece must be schooled by the powers of Western Europe, and taught not to follow the example of Russia, nor to disgrace herself in comparison of Turkey, but to accept the principle of religious liberty as one of the essential conditions on which alone a rectification of frontier can be secured to her. All these things are trifles in comparison with the question of religious liberty in those countries which converge upon the Teutonic centre of Europe, or, shall we say, upon the central axis of influence upon which both Berlin and Vienna rest. All friends of true Christian progress will accordingly wish God-speed to the enterprise on behalf of religious liberty in those lands which has been under-

taken by the Evangelical Alliance.

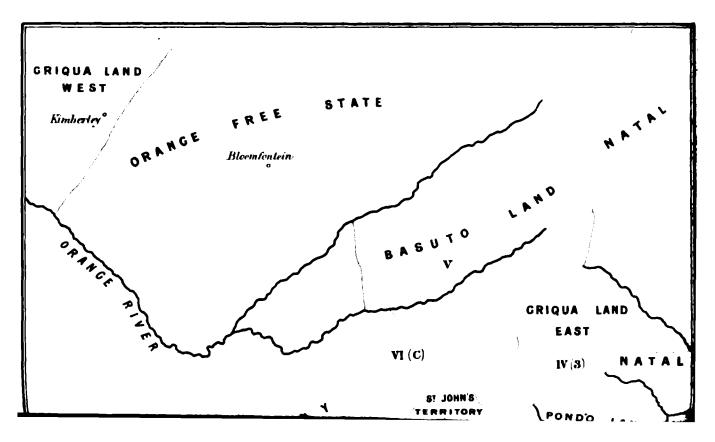
It might perhaps have been expected that some reference should be made in this paper to the Falk Laws, but those laws have been discussed at length in every journal of Europe. Moreover, though the subject may be connected with that which has occupied our attention in this paper, it is yet materially different. The Falk Laws were a counter move made by the German Government in consequence of the aggressive policy of the Vatican some years ago. They embody the claims of the Emperor to coordinate if not supreme control over the politico-ecclesiastical administration of one of the three churches whose position and mutual rights were defined by the Treaty of Westphalia. These claims are the correlative of those rights which belong to the Emperor in his capacity as

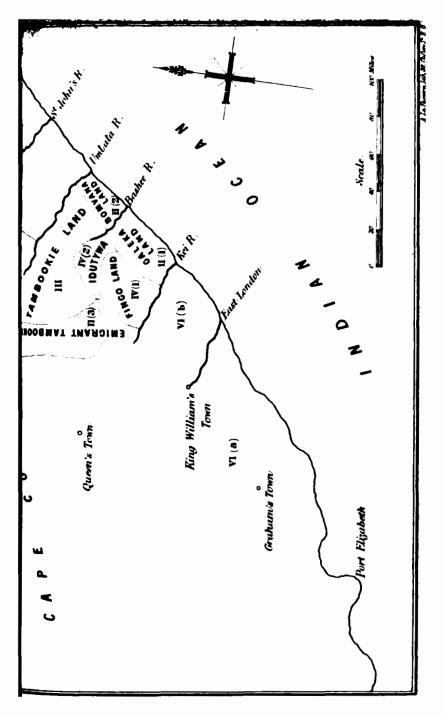
summus episcopus in regard to the established Protestant Churches. They are grounded upon the same general principles, and are made part of the same Church and State theory. That Church and State theory it does not fall within the scope of this paper to discuss, although it well merits discussion, and in its peculiar features is little understood in England. The State and Church conditions of Germany have scarcely any analogy, are at essential points altogether in contrast, with the relations between Church and State existing in England. Until the State-Churchism of Germany is done away, there can be no true spiritual freedom, and little, if any, sustained spiritual life within the Established Churches of Germany. question, as I have said, does not fall within the scope of the present paper, the subject of which has been religious liberty in the conventional sense, regarded as a civil right, and especially the liberty of dissent, and of voluntary Christian profession and worship.

- ART. IV .- 1. Compendium of South African History and Geography. By George M. Theal. Second Edition, Revised and Enlarged. Lovedale: South Africa. Printed at the Institution Press. 1876.
 - 2. Imperial Blue-Books Relating to South Africa.
 - 3. Blue-Books of the Cape Colony Relating to Native Affairs.

THE war in Zululand, after the battle of Ulundi, was speedily brought to a close. Ketchwayo, its paramount chief, was captured and departed to the Cape for safe custody.* The terrible engine of war, originated in the time of Chaka, has been broken up and the whole of the military system abolished. The country and people have been portioned out to some thirteen petty chiefs who have taken oath to rule justly; to take no life, but by due process of law; to suffer all young men to marry as they shall list; to enter upon no war, either amongst themselves or with their neighbours, but with the sanction of the British Government; not themselves to import, nor to suffer the importation of firearms, but with the same sanction; and not to alienate any land to white men. They are to remain under their own laws, to be governed according to their own customs, and to refer any difficult matter, which may perplex their judgment, or awaken a conflict of interests among them, to the British Resident, who is to be "the eyes and ears" of the country, and whose powers ought clearly to be those of paramount chief, but are not. Indeed, it appears doubtful as to whether he has been invested with any power, except it be the power of giving advice to the people or their chiefs, and of keeping the Lieutenant Governor of Natal, and Her Majesty's High

^{*} This was, and is still, a thing of wonder to thousands of the Kafir nation, one which they find it hard to credit. Conquered, the chief might be; slain in battle, he might be; chased as a fugitive to a strange land, to dwell in dens and caves of the earth, he might be; hemmed in on all sides round, so that escape was impossible, he might be; but sconer than be caught by his pursuers, his armour-bearer's spear, or his own trusty weapon. would release him from life. A strong assurance to that effect had been given to the writer on the morning of the very day which brought tidings of his capture. Nevertheless the capture was a fact.





Commissioner at the Cape, fully informed as to the political state of all the tribes. One of the chiefs is the notorious John Dunn, a European, who has been perverted, if not to the Zulu faith, yet to the Zulu manner of life, and the purity of whose motives, in his conduct to the late king and to the English Government, is open to suspicion. His district is said to be by far the largest of the thirteen, and to cover nearly the whole frontier of Natal. Self-interest may keep him loyally to his engagements, and, if he should retain his ascendency over the people, he may render service to the cause of peace. whether the settlement itself may prove to be satisfactory or the reverse; whether the new order of things may be found to work without dangerous friction or not; and whether the Imperial Government has, or has not, relieved itself of one whit of responsibility by its somewhat ostentatious refusal to annex the conquered territory; are things which coming history will not be slow to reveal.

In the meantime the eddying surges of war in other parts of the country are being arrested and spent. The rebels on the northern border have been subdued by Colonial forces. The old Baphuti Chief, Mooirosi, with his brave but limited following, has been slain, and his formidable mountain fortress has been stormed by the Cape Mounted Rifles, and Colonial and Native levies. Sekukuni, too, the man who, instigated in all probability by the Zulu king, made war upon the Transvaal Republic and defeated its boasting burghers, thus disclosing at once the helplessness and bankruptcy of that ever aggressive State, and giving occasion to the Imperial Government for its annexation, has been rooted out of his military fastnesses, which have been destroyed, and is now also in safe custody. And but for some ominous restlessness on the part of the Pondoes, and persistent mutterings on the part of a body of discontented Transvaal Boers, who are inspired with strong hereditary detestation of British rule, the prospects of peace throughout South Africa must be pronounced good for some time to come.

But now comes the still more difficult problem of so providing for the good government of all these peoples, as to secure their real advancement and to prevent, if possible, a recurrence of wars in the future. How are these ends to be secured? Certainly not by leaving every petty State to look after itself and to take care of its own

interests only. The true policy must be at once comprehensive and equitable. It will take account of the interests of all, and will look intelligently into the future as well as to the necessities of the present. If troubles ahead can be clearly foreseen, against which provision can be now made with comparative facility, it will not be left to future generations alone to deal with those troubles. Nor must the policy be so hesitating and shifty as in times gone by. As to its essential characteristics, it must not be liable to perpetual change, with the changes of either Imperial or Colonial ministries; much less must it be affected by popular clamour either at home or abroad: but must be based on principles and pressed forward on lines which commend themselves to all intelligent statesmen. The difficulty to be encountered in the inception and steady prosecution of such a policy is not that which is likely to be developed in the Colonial Parliaments, or to be obtruded by the Imperial Government, provided that be left free to act upon its own judgment, but that which may arise from spasmodic outbursts of passion on the part of a misinformed British Public as it brings its influence to bear upon the susceptibilities of English political parties, or is used by them for their own advantage.

We assume then, in the first place, that our present South African possessions are not to be given up. We are not going to abandon the country to any native or foreigner who may have the courage to take possession of it. A day of shame like that the British Empire could be hardly expected to survive. It is a thing not to be thought of. We could not leave our brethren, against their wills, to pass under the voke of the alien. We could not expect them for a mere sentiment to abandon their homes, in which they have been born and brought up, and to move off to some other quarter of the globe, in order that certain savage tribes might have all the land that they could covet. No politician, no philanthropist, no member even of the "Aborigines' Protection Society," would advocate such a course as that. And then, in the second place, while retaining our present possessions, we shall certainly also continue to restrain the neighbouring native tribes from making war as they shall list, either upon us or amongst themselves. We may declaim against annexation as we will; refuse to assume the responsibility of authoritative interposition and government as we may;

profess to leave the natives to look after themselves and their own interests with the utmost possible respect for their manhood and their freedom; and think with ourselves that we are verily doing the thing which is at once just and generous. But, if we really act upon such noninterference principles, we shall be providing most effec-

tually both for their future suffering and our own.

The real danger to be apprehended is not that all the native tribes will combine together for the expulsion of the white man. The thought of such a combination has probably been no strange one to sundry Kafir chiefs. It has possibly been talked of in solemn Kafir conclaves. It may have formed the base of deep-laid schemes which have been already tried and failed. There appears to be ground for more than suspicion that Kreli, Ketchwayo, and others. put "the egg" into the incubator, and waited (or tried to wait) patiently for its successful hatching. But all to small effect. Trouble enough ensued. But as for the combination of such a heterogeneous mass of elements, for the achievement of a common purpose, that was a thing for which the requisite conditions did not exist. To make that possible there must be either, first, a towering, allpervading Kafir power from which none would dare to stand aloof, or secondly, such a general display of injustice, wrong, and oppression on the part of Europeans towards the natives as to make their neighbourhood utterly intolerable; neither of which things is likely to occur under the shadow of the British throne. And it may be safely affirmed that no such combination of the natives will occur.

But, leave the Kafirs to themselves, to be governed by their own chiefs, according to their own customs, with no other interference on the part of the Imperial or the Colonial Governments than such as may restrain them from making war upon each other, and the danger, arising out of mere increase of population, will very soon manifest itself. The Fingoes, rescued from serfdom in 1836, to the number of from ten to fifteen thousand, had so increased in thirty years, that some forty-five thousand of them migrated from Victoria (East), and settled under Government, in the Trans-Kei. Others have since followed to the territories of St. John and Griqualand (East). No other tribe has increased at such a rapid rate, and perhaps no other will do. But all the tribes, with a few years of peace

and rest, increase at an astonishing rate. The Galekas and Gaikas, after the wars of 1846 and 1850, were further reduced by the fearful cattle-killing delusion of 1856, to a mere handful of people. Yet they had again grown, by natural increase, to be formidable antagonists by the end of twenty years. If, therefore, the Imperial and Colonial Governments abstain, on principle, from other interference in Kafirdom than that which is needful to keep the peace, they will, by-and-by, be confronted by difficulties arising out of the mere increase of population which cannot be turned aside.

These difficulties will be twofold, or will spring from a twofold root. There will be the difficulty of land. That now possessed by the several tribes, whose boundaries are more or less accurately defined, will soon become altogether too strait for them. Already, in fact, the cry is heard. The cry of Kreli, whether with or without foundation in the necessities of his people, was for more land. His wish may have been mainly the ambition to recover. to the full extent of it, his old domain. But this will hardly account for the fact that almost every tribe in Kafirland is asking for more land. The Hon. W. Ayliff, Secretary for Native Affairs in the Cape Colony, made a tour through the country towards the end of 1878, in order to make acquaintance with the people, their state and their wants, holding meetings with the chiefs and others in all the principal sections, and inviting a free statement of any grievances of which they had to complain. At a meeting of the Pondomise at Qumbu, on the 18th of October, he is reported to have said, somewhat impatiently, "I hear to-day, what I have heard everywhere else, 'Land, land, more land.' I have often thought what a great man I should be if I could make land for all who ask for it. You ask for land already occupied by others. If I did as you ask me to do, there would be nothing but confusion and trouble in the land." At a similar meeting, held at Umzimkulu, on the 2nd of November, Sidio, one of the chiefs, said, "I have nothing to complain of, only I want more land." More land is asked for in the St. John's territory, and in Basutoland. Therefore it is clear enough that there is a hunger for more land in South Africa, but that hunger is felt far more keenly by the native.

^{*} Appendix to Cape Blue-Book on Native Affairs, (G 43. 1879) p. 52.

and is pressed far more urgently by him, than it is by any European colonists. These expect no lands but such as they are prepared to purchase, and for which they can secure individual titles.

But this over-population, speaking of course only in reference to the present state of agriculture, is rendered still more perplexing and dangerous, because of native habits, customs, and traditions. According to these, the chief business of the men, in addition to the simple duties of administration, is war. During peace they will, indeed, amuse themselves by patiently carving out curious wooden tobacco-pipes, whittling knob-kerries, making and polishing assegais, and in preparing hides or skins for the manufacture of carosses. But the women "have almost all the heavy labour to perform. They are hewers of wood and drawers of water. They are also architects and builders. who must bring all the materials to the spot, and therewith construct the dwelling. They are (or were, before the intrusion of European notions amongst them) the sole cultivators of the soil, which they accomplished by a curious kind of spade made of hard wood, cut and shaped by the men of the kraal. To them it belonged to sow the seed, to weed the ground, to protect the growing crops from the attacks of animals and birds, to reap the harvest, and to carry it home in large bundles on their heads to the threshing-floor, where they beat out the grain with sticks, and when properly winnowed, deposited it in large holes, dug by the men in a very peculiar manner under their cattle-folds." Therefore, in addition to the simple inconveniences arising from overcrowding, there will result this still greater danger that the men, having no regular and serious occupation, pressed by the growing discomfort and want, and cogitating, discussing, and reciting with pride the prowess of their forefathers, will be moved by an ever-growing impulse to seize the shield and spear, and to attempt to win by force that which they could not otherwise obtain.

Thus it was that such matters were always settled in the olden times. Then, if through increasing numbers, more land was needed, more could be speedily won by military skill or dash, or the wielding of superior force, and therefore more land was so won, or attempted to be won

^{*} Rev. W. Shaw. Story of My Mission. Second Part. P. 162.

with or without the plea of justifying cause. And not only so, but the perpetually recurring wars, wars for mere plunder or for territorial extension, or for the settlement of disputed boundaries, or for the avenging of real or supposed insults or wrongs, or for the gratification of ambition and extending power, or to determine the disputed claim of succession to the chieftainship, helped to keep down the population. Witness the fierce conflicts between the sons of Palo, Gcaleka and Chachaba; those between Gaika and Ndlamba; and those of Chaka, Dingaan, Mosilikatzi, the Fekani, and a multitude of lesser note. To a people all of whose men are warriors by profession, and who are otherwise without serious occupation, the all but resistless impulse will be to follow in the same track, and thus to diminish the population, if not to increase the land.

It is true that this aspect of the danger has been already greatly modified amongst the border tribes by contact with Europeans. The introduction of the plough and other implements of husbandry, perhaps more than the force of example, has taught the proud warrior that even he ought to put his hand to the doing of earnest and productive work. Many thousands, from most of the tribes, pass from year to year into the colony in search of employment. object is to secure sufficient money to purchase the requisite number of cattle to set up a respectable establishment amongst their neighbours. This accomplished, they retire for settlement at home, after the fashion of other successful men of business. For some years past, up to the time of the late wars, there was another motive, still more powerful. impelling in a like direction. It was the universal longing to be possessed of firearms. The chiefs encouraged, perhaps originated, or strongly stimulated, this passion. It happened that just then the demand for labour at the diamond mines, and on the colonial railway works, was very great; so the men came in troops from all regions. Any journey could be undertaken, any work performed. any hardship endured, if but the means could be secured of purchasing and bearing away to the fatherland a good rifle, with the requisite ammunition. The mischief to which that led has been already manifest. The good has been little heeded, perhaps by few suspected. .

Yet the good must have been also very great. The men have been taught to work, and to work hard too. It need not be supposed that their natural and sentimental aversion to

work has been altogether eradicated, or that they have formed habits of industry which will cling to them throughout the remainder of their lives. But they have broken through a custom and a sentiment, in such wise too as to bring upon them no sense of shame or humiliation from their neighbours, and they have acquired a knowledge of the use of pick, and spade, and barrow, which can never leave them, and which can and will be turned to account in many an emergency. But the force and extent of such counteractives as these are not, as yet, by any means sufficient to produce any very material effect. Much more must be done, and done quickly, too, if the otherwise inevitable trouble is to be neutralised by anticipation.

Now it so happens that the Cape Colonial Government is lending its serious attention to the solution of this problem. It has not been unobservant or inactive in the past, as we shall presently prove, though it has not, by any means, done so much as ought to have been done. But, notwithstanding all accusations and clamorous misrepresentations to the contrary, it is the only body, the great missionary societies excepted, which is now attempting to do anything. The Imperial Government did, indeed, attempt to do something vigorous in this direction after the war of 1850-3:

"It had then come to be pretty generally recognised that there were but two courses open in dealing with the Kafirs-one being to civilise them, the other periodically to fight them. Seventy years of intercourse had cleared away all the mists that once hung over this question, and left the fact naked and plain that permanent peace was impossible with neighbouring tribes which were barbarous and unprogressive. They might be beaten,—they had been over and over again, -but the fruit of conquest was always lost with the recall of the imposing military force which was brought to the front. Their vitality seemed unconquerable. Crushed to-day, they were more powerful than ever to-morrow." Therefore an attempt must now be made to reclaim them by the force of civilisation. "Sir George Grey came out (December, 1854) with the means as well as with the will to deal thoroughly in the matter, as the Imperial Government placed at his disposal a large sum of money to be used in improving the Kafirs. Having inspected the locations in British Kafraria and made himself acquainted with every particular, he directed a succession of vigorous blows at the very life of the heathenism which was dominant there,-a life largely made up of ignorance, superstition, and indolence."—Theal's South Africa, Vol. II. p. 49.

To aid in dispelling the ignorance, he offered to the missionaries of various religious denominations grants in aid for "the establishment of large industrial schools, in which the native lads should be taught not only to read and write, but to work as mechanics, and where they should be trained in orderly and decorous habits." These grants were continued till the arrival of Sir P. Wodehouse in 1861, soon after which they fell through. To aid in overturning the superstition which was manifested to a large extent through the witch-doctor, who undertook the cure of diseases by the most extravagant expedients, "a splendid hospital was erected in King William's Town, where medicine, attendance, food, and comforts such as they had never known before, were offered free to any sick who chose to come. The design was as prudent as it was benevolent; but unfortunately it was frustrated (by the great cattlekilling mania) before its effects could be tested by time. While a blow was to be aimed at hereditary idleness by the commencement of great public works, such as road-making and the construction of a harbour at the mouth of the Buffalo. To stimulate the men to work, a number of traders were encouraged to settle in the province, and to exhibit for sale their tempting wares to the natives."*

Than such undertakings as these nothing could have been more wisely attempted. But the Imperial Government was as impatient of the cost and trouble of peace as of war. It could not any longer be troubled with the separate administration of British Kafraria. "By order of the Secretary of State for the Colonies proposals to annex the province had been made on several occasions to the Cape Parliament, and had as often been rejected." This resistance was at length overcome by an Act of Union passed by the Imperial Parliament, under the pressure of which, after much opposition, Sir P. Wodehouse succeeded in getting through the Cape Parliament an Act incorporating British Kafraria as two electoral divisions. Thus the whole responsibility of future attempts at civilising the Kafirs was handed over to the Cape Colony.

The work so nobly but fitfully begun by the Imperial Government and its High Commissioner has been taken up and not unworthily prosecuted by the Colonial Govern-

^{*} Theal, Vol. II. pp. 50, 51,

ment, not only within but beyond its own boundaries. As to that which has been done for the natives within the colony we shall not now write, but would direct attention

to that which is being done beyond the border.

It is too often assumed, no doubt upon the ground of the proved selfishness of human nature, not excepting even the great-hearted English nature, or that of her (possibly degenerate) offspring in the colonies, that the Cape Parliament from time to time annexes certain native territories, or attempts to annex them, for the mere purpose of taking possession of the land, and distributing the best of it amongst her own hungry citizens. But such a conception is destitute of even a shadow of truth. refer to the annexed, or semi-annexed, territories in These are all beyond the Colonial Kafraria proper. boundary. Their relationship to the Colonial Government is not identical, but greatly varied. They may be simply in the position of protected States, otherwise left to govern themselves, as in Pondoland. Or the annexation may have been formally made and legally completed by Acts of both the Colonial and Imperial Parliaments, and an Order in Council, as in Basutoland. But even in that case they are not incorporated into the colony, but remain as a separate political community outside the colony, having their own codes of law, and their own provision for the administration of law. The Residents, magistrates, and other officials are appointed by the Governor of the Cape Colony, by and with the advice of his responsible Ministers. and their duties are to watch over the interests of the people, enforcing submission to law, encouraging industry in every form, restraining and seeing to the punishment of crime, and promoting the construction of roads, bridges, and other public works. The theory is that each of these annexed States shall provide for the expenses of its own government. But the fact is that a very considerable deficit has to be made good from year to year out of the Cape revenue. Thus, in the year ending June, 1877, the total expenditure for these territories was but a trifle short of thirty thousand pounds (£30,000), whereas the actual revenue fell short of eleven thousand pounds (£11,000), leaving a balance of nearly nineteen thousand pounds (£19,000) to be provided for out of the proper Colonial revenue. This was exclusive of Basutoland, which is more completely within the grasp of the supreme power. There

the revenue for the year ending with December, 1878, was something over twenty thousand pounds (£20,000), while the expenditure (exclusive, however, of grants for educational purposes made direct from the Cape) fell below sixteen thousand pounds (£16,000). These statements will be in proof that the paternal care exercised over these extra-colonial people is for their benefit, and not for Colonial profit. Of course there is also the political motive, which derives its force from a contemplation of the future, and which rests upon the conviction that it is better and cheaper to conquer an enemy by the ministry of peace and love than by the destructive implements of war.

A lucid "Memorandum on the Existing Judicial and Political Divisions of Kafraria," drawn up by Sir Bartle E. Frere, for the use of his Cape Ministers, in 1878, and transmitted to the Secretary of State for the Colonies on the 4th of June of that year, is of great interest in itself, and may serve to impart a more distinct conception of the relative state of things in that country. The original Memorandum is accompanied by a coloured sketch-map, which greatly facilitates the complete mastery of the position.

"The extent to which the various districts and provinces inhabited by Kafirs are under the jurisdiction of the Crown or Colony, or are subject to the English or Colonial law, varies so much, that it is difficult to explain without a map and detailed description. There are at least six distinct stages of approach to the condition of colonists under Colonial law.

"I. There is the protected state, in a position subordinate to the British Government; but governed by its own customs, and by its native chiefs. Pondoland is the only remaining instance of this class. (Sir Peregrin Maitland, having protected the Pondos from destruction by the Zulus, made a treaty with Faku, their chief, in 1844, which distinctly provides for their subordination to the British Crown.)

"II. The second class includes territories where the sovereignty of the British Government is absolute, but where nothing has hitherto been done to give the people the benefit of English or any other civilised law in spirit or in letter, beyond appointing English magistrates, who administer what is called 'Kafir law;' that is, they act very much as an Englishman acting for a Kafir chief might be expected to act, after consulting Kafir chiefs and councillors, deciding disputes and adjudicating complaints according to Kafir customs, whenever it is not very flagrantly

repugnant to English notions of right and wrong. In this class are—1, Galekaland; 2. Bomvanaland: 8. Emigrant Tembu-

kiland; and 4, St. John's Territory.

"III. In the third class would come Tembuland, where a further step has been taken towards bringing the country under British rule, by the submission to Her Majesty's Government of joint resolutions of both Houses of the Colonial Parliament in asking leave to proceed by legislation to annex the territory to the Colony.

"IV. In the fourth class are territories where all but the last step has been taken annexing them to the Colony, and placing them under a code of British Colonial law, as well as under British magistrates. In this class are-1, Fingoland; 2, Idutywa Reserve; and 3, Griqualand (East). (These territories simply await the provision and promulgation of a code of law to make the annexation complete.)

"V. The fifth class, in which the territory has been annexed to the Colony, is administered by British Colonial magistrates under the Government of the Cape, but the administration is governed by a special code, known as the Basutoland Code. Basutoland

itself is at present the only territory in this class.

"VL A sixth class might be found in the Native Locations, within the Colonial border, in almost all the frontier districts. These are theoretically and legally entirely subject to Colonial law, but the practice is widely different from the theory, and the administration, though nominally guided by Colonial law, administered by Colonial magistrates, is really to a considerable extentvarying in different locations—guided by Kafir usage, interpreted or administered by Kafir chiefs or headmen."

The state of government in all these cases is obviously transitional. The High Commissioner proposes, "by act of the Crown (letters patent or Order in Council), followed by a resolution of the Colonial Parliament, to constitute Kafraria a separate Province, attached to the Cape Colony, to be governed by the Governor and High Commissioner by and with the advice of the Ministers of that Colony." But into the details of the proposed local administration there is no need now to enter. All that remains yet to be determined by the onward course of history. But it may be observed that the objects sought to be accomplished by the Colonial Government in Kafirland proper are identical with those which were proposed to be accomplished in British Kafraria by the Imperial Government, through the High Commissionership of Sir George Grey. Or to adopt the language of the Hon. the Secretary for Native Affairs,

as given in the Cape Blue-Book for 1879 (Appendix G 43, p. 64), "The exercise of our power is directed to the ultimate destruction of the rule and authority of the chiefs over the people, by the substitution of European magistrates and law; the imparting of education in both book-learning and useful trades; the abolition of heathenish and savage rites; the improvement of dwellings; and in general, and by all means which are consistent with true liberty, the advancement and benefit of the tribes under our rule."

Next to the Fingoes, the Basutoes are the people who have most rapidly advanced under this paternal rule. They are a people who have been taught by a long succession of galling and all but crushing evils. By the great war-waves set in motion by the terrible Chaka they were "scattered and broken like flocks of sheep before packs of wolves." These scattered ones flocked again around their chief, Moshesh, in the all but inaccessible mountain regions in which the Orange and Caledon Rivers have their sources. There they had war with the English in 1852. After the retirement of the English to within the Orange River boundary they had war with the Orange Free State, but when reduced to the utmost extremity. suffering from disease and famine, and incapable of further resistance (in 1868), they appealed with success to the High Commissioner to be taken over as British subjects. The Free State very naturally protested against this act of interference, but the matter was ultimately arranged, and peace was concluded and established in February of 1869. The real and effective government of the people by a Governor's Agent and a number of assistant magistrates under the new code was not initiated till 1871. The favourable results began to immediately appear, and have ever since been advancing. In 1873 about three hundred thousand (300,000) bushels of grain and two thousand (2,000) bales of wool were sold to the traders. This had mounted up in 1878 to nine hundred thousand (900,000) bushels of grain and three thousand (3,000) bales of wool. The census returns of 1875, which give a population of one hundred and twenty seven thousand seven hundred (127,700), of whom but three hundred and seventy-eight (378) were Europeans, show that these people were possessed of 35,357 horses, 217,732 head of horned stock, 303,080 sheep, 215,485 goats, 299 waggons, and 2,747 ploughs.

The means adopted for their advancement have regard to the administration of justice, the maintenance of an efficient police, with prisons for the safe detention of criminals, the promotion of education, both literary and industrial, the supply of medical advice, the construction of roads and bridges, and, in short, the encouragement of everything by which their real interests may be promoted. The missionaries of the Paris Evangelical Society have laboured amongst them with patience and fair success for some forty years:

"In 1878 there were 10,300 church members, and 2,000 children attending the forty-four mission schools. European clothing is commonly worn, and there are instances of stone and brick houses having been erected by some of the chiefs. Such signs of rapid advancement and prosperity show the wonderful elasticity of African tribes. For, as recently as 1867, this people was in extreme indigence and misery; peace and good government, since that time, have raised them to their present position."—Theal, Vol. II. p. 187.

Measures of the same kind are being also adopted for the advancement of other tribes, some of whom are beginning to move hopefully in the same direction, notably in the territory of St. John and Griqualand (East). And, though it is not to be supposed for a moment that these men are the less fitted for war because that they have learned to hold the plough and till the ground, the cares of agriculture will serve greatly to preoccupy their minds, while the acquisition of personal property will induce a keener sense of the risks of war, and experience will soon prove that the produce of the soil, even with but imperfect culture, will far surpass in value the passing spoil of the most successful plundering foray.

Nevertheless, the rule is that these forces are working but very slowly towards the desired result. It is hard for a people who have been wont to live an altogether idle life suddenly to put on habits of carefulness and industry; and now that the Government has obtained full Parliamentary power to disarm all the natives under its authority, one very powerful stimulus to begin a course of regular physical toil has been suddenly dissipated. For amongst the most effective of all such inducements to a Kafir youth was doubtless the prospect of possessing his own rifle. But the sale of such dangerous weapons has been very much

restricted, if not entirely stopped. The disarming process has begun. The Kafirs on the borders of the Cape Colony, who had been engaged in active hostility against the Queen's forces, were, of course, disarmed on their submission. The Fingoes have surrendered theirs, at the request of the Government, though not without manifest irritation. Some other of the smaller tribes have done the same. But the Basutoes are strongly opposed to the requirement, and may possibly offer resistance. They are doubtless the bolder in assuming this attitude, because of the protracted resistance which the old Baphuti chief Moirosi presented to the Colonial forces in his almost inaccessible mountain fortress. For Basutoland is full of natural fortresses. It is possible, however, that with prudent handling, this may prove to be but an incident of small moment in the general forward movement.

If, however, there is to be any hope of successfully anticipating the coming pressure of population, the plans of the Colonial Government must be pressed forward with unslumbering vigilance. There need be no interposition of force, no introduction, in this age, of the old feudal system of villeinage, no apprenticeship of youths to Colonial farmers and others for the learning of particular industries: though, if men could be trusted to honestly and humanely work it out, some such system might be of immense advantage to all the parties concerned. But, when the conditions have become such as that men must work or starve, when it shall have become manifest that the steady and patient worker has every advantage over the mere idler, when support can no longer be secured either by lawless plunder or as the fruit of war, then even the lordly Kafir will condescend to put forth his strength in earnest toil. Therefore, as rapidly as circumstances will permit, the system of superseding the old tribal tenure of land, and issuing individual titles for the holdings, which has been so happily begun amongst the Fingoes and Griquas, must be extended throughout the country, and all future applicants for land must be dealt with individually, as in the case of Europeans. The passion for land must itself be individualised. It must be so treated as to become an inducement to every youth to labour that he himself may win the power to purchase. In property so won and secured, there will arise an interest very different from that which pertains only to the tribal domain, and there

will be the further inducement to increase its value in

every possible way.

Then the great trunk roads, from convenient points on the coast,—the mouth of the St. John's River being one, with their several diverging branches, and the needful drifts and bridges,—must be at once begun, and pressed to completion with vigour. Thus profitable work will be found for the time; money for the purchase of land, or for the stocking of small farms, will be earned as wages: and an impetus will be given to agriculture by ensuring

easy transit to market.

Industrial schools, attached to those which provide for either elementary or more advanced education, would probably be quite enough to supply such wagon-makers, smiths, and carpenters as may be needed by the natives themselves for some time to come. All such educational establishments are already liberally provided for by the Education Department at the Cape. Missionaries, who attend to their proper work, ought to be, and are encouraged, the Cape Government having a high appreciation of their work. Medical men ought also to be connected with all the principal stations. And all traders ought to have full liberty for the distribution of their goods far and wide, always excepting-and that most rigidly—guns, powder, and spirits.

All these things are being attended to by the Government of the Cape Colony; many think it to be a sad, if not fatal blunder, that the same kind of policy has not been introduced, at this most opportune moment, by the Imperial Government through Natal to Zululand. For such blunders it is said we shall have to pay heavily in the future, while the general policy indicated above is sure

to be sustained, and, in the end, to prevail.

To any one who has made but a hasty visit to the Cape. especially to the midland and eastern districts, it may appear to be preposterous enough to place such stress upon the danger to be anticipated from over-population. The country itself is so vast, the population, as compared with that of European countries, is so sparse, the farmsteads within the Colony, and the kraals beyond, are so far apart, and the absence of enclosures so complete, as to give the impressiont hat the greater part is still awaiting appropriation, or, at least, occupation. But, unless the stranger has completed his tour at some unwontedly

favourable season, he must also have observed the general scantiness of vegetation, the exceeding dryness of the climate, and the consequent vastness of acreage required for the pasturage of moderate flocks or herds, and the precariousness of the harvests, produced by the prevailing unscientific agriculture. The fact is that, if the present style of farming obtains much longer, the whole country, both intra- and extra-colonial, will become hopelessly overstocked. Large tracts of land can never serve for anything else than grazing purposes. But even these, by proper fencing, dressing, and nursing, especially if judiciously interspersed with tree-plantations, would carry an indefinitely greater stock than at present. It is true, also, that the dryness of the climate, its aptness to be visited with successive years of drought, and the depth of the river courses below the general level of the country, making irrigation extremely difficult or quite impossible, present difficulties in the way of successful agriculture which appear to be very formidable. But they are not by any means insurmountable. Very much more extensive irrigation might be and ought to be secured, whether from river courses or artificial dams. It is probable that the climate itself may be considerably modified by extensive forest planting. And most assuredly there might be secured, with a little more scientific care, greatly increased productiveness. Indeed, we entertain not a doubt that, with anything like skilful management, the Cape Colony and its neighbour-lands would provide for a population a hundredfold greater than it would at present sustain.

If a grand confederation of all the colonies and states of South Africa can be effected, and no doubt with the persuasive influence of the Imperial Government it can be, then these principles of native policy could be, and doubtless would be, extended to all the tribes as far as to Delagoa Bay and the Limpopo on the east, and to the Portuguese settlement of Bengueba on the west. Within these limits, with good roads, improved agriculture, and a government at once generous and firm, there would be found land enough to sustain all the multiplying peoples, of whatever descent, for long ages yet to come. The project may be regarded as too ambitious, or as simply visionary. But it is neither. And the difference between undertaking to deal with the looming difficulties thus, and leaving them to drift, or to adjust themselves, or be adjusted, as the emer-

gencies arise, is this, that the one, by forethought, provides for a possibly peaceful solution, while the other must

inevitably result in a succession of bloody wars.

There is another difficulty which presents itself sometimes to thoughtful men, but whose solution is neither so obvious nor so pressing as those already mentioned, namely, that which is necessarily involved in the permanent settlement, side by side, of the white and the black races. It is to be hoped that, in process of time, the black races will have so advanced in civilisation as to be pretty much on an equality with the whites. No doubt that time is very far distant in the future, and many will affirm at once that it is impossible for it ever to arrive. But the facts of past history may induce caution in that regard. Time was when few could have suspected that the descendants of the wild Scythian hordes of Northern Asia and Europe would, at some future time, surpass by such immeasurable degrees the achievements of the heroic Greeks and Romans. The Kafirs and kindred races have no lack of life-energy. There seems to be no evidence of its beginning decadence. There is supplied a good base for indefinite mental development and moral improvement. And, though it may be objected that, had the requisite mental and moral force been there, seeing that it has had abundant opportunities of manifestation in the times gone by, it might have been expected to give some stronger proof of its presence, it may be answered that there has probably been an infusion, and that not so very far back in the past ages, of new blood from an eastern source, which has very materially increased the capacity of the race, and that the requisite stimulus has hitherto been wanting. But if the capacity is there, and if its life-base is such as to promise not diminution but increase, then the time will arrive when the average intelligence and skill, as well as physical force of the black race will equal that of the white. Till that time arrives, there can be no question as to the side on which the supremacy shall be. But when it does arrive (as there is no good reason to doubt that it will arrive), what then? Will not the vast preponderance in numbers cause the balance of power to pass over to the blacks? Now, shocking as the very thought of that may be, yet, premising, as we must, that these have become as highly civilised as the whites, and as thoroughly penetrated with the principles of Christianity, there is no need to

anticipate unwonted or exterminating violence in the

change.

Or can it be possible that, in the process of the ages, the difficulty should be silently solved by the amalgamation of the two, so as to constitute one new people? The Kafirs themselves are shrewdly guessed to have already in their veins an infusion of Arab blood; and, should the European blood, now so widely diffused over the southern limit of the great Continent, be taken up into the same great stream, is it not possible that there might emerge a race of men better fitted for the actual dominion there than either of the present ones? Difference in colour, and the present wide gulf of disparity between the races in all matters of taste, sentiment, and social habits, present a barrier to such a solution which is not promising, and indeed makes its very mention to seem to be not only preposterous, but intolerable. But reject that from the forecast, and what then? Must the black races be exterminated? or can they be, by anything but a process similar to that by which wild beasts are being made to disappear? Must they be kept down by main force, in a state of serfdom and ignorance? and, if any should think that to be desirable, is it possible? Or must they be improved into good citizens, and gradually elevated into a position equal to that of the whites? Then, if their race-energy be such as facts now seem to indicate, the time, according to all present appearances, must come when the dominion will pass over to them.

The difficulties presented by this aspect of the problem are still, however, very far away in the future, and their solution may fairly be left to be dealt with in the millenniums which are yet to come. The more proximate and

pressing ones must be dealt with now.

- ART. V.—1. The Life of Alexander Duff, D.D., LL.D.

 By George Smith, C.I.E., LL.D. Two Vols.

 London: Hodder and Stoughton.
 - 2. The Life of John Wilson, D.D., F.R.S., for Fifty Years Philanthropist and Scholar in the East. By George Smith, C.I.E., LL.D. London: John Murray.

For several reasons these biographies are most welcome. One reason is the proof they afford that the missionary spirit of the Church is as vigorous now as ever. In order to find examples of the spirit of sacrifice and devotion. which is the very life-breath of the missionary enterprise. we need not go back to the days of Carey, Martyn, Schwartz, Brainerd, and Xavier. Dr. Duff has been called "the prince of modern missionaries," and the title is scarcely too eulogistic. Two lives more nearly approaching the missionary ideal than those of Duff and Wilson it would be hard to conceive. And they are only higher types of a character which is the common glory of the churches. There are many engaged in the foreign service of the Church who, if they are inferior to these two princes in intellectual calibre and general fame, are not a whit below them in self-abnegation and consuming zeal in Christ's service. It is no little comfort to be assured that there are no signs of a succession of missionaries of the right quality failing. The present volumes will do much to secure such a succession by feeding the lofty enthusiasm so essential to the missionary enterprise. The religious needs of our own country are before our eyes, and therefore are not likely to be forgotten. disadvantage of distance in the case of the foreign work can only be overcome by a force of sanctified imagination and enthusiasm, which lives like these will do much to promote.

Both Duff and Wilson are examples of the lifelong service, which is so important a condition of success, especially in India. We can conceive it possible that among a people of our own speech and kin Christian work may be successfully carried on by a ceaseless succession of labourers, although even then continuity would be desirable. But in countries like India and China, and even Africa, where every feature of human life is as novel to the European as the natural scenery, and where years are necessary to initiate a stranger into the data of the problem to be solved, considerable success is scarcely possible on such terms. Hence we find that in all churches the most successful missionaries are those who, having put their hand to the plough in vigorous youth, on to grey and reverend age, have not looked back. Duff and Wilson both gave their lives to India—the latter entirely, the former

substantially.

Both were Scotchmen, and belonged to the same section of the Church. One was to Western what the other was to Eastern India. Any Church or country might deem it an honour to send forth two such men contemporaneously. Comparison is out of the question. We should as soon think of comparing Paul and John. Each had his own gifts, and used them to the utmost in his own way. Duff was better known, partly from his longer and more frequent visits to this country, and from his last years being spent here; partly from the extraordinary oratorical gifts, which enabled him to bring his work home to the popular mind. But Wilson's character is very charming in its perfect simplicity, its winning gentleness and courtesy, its ample knowledge, its saintly refinement. One was impetuous, and brimming over with life and energy like the winter torrent: the other deep and placid as the river in its settled course. In both one and the other we glorify God. Nor should we forget that Scotland gave the world Livingstone and Moffat.

The two missionaries are happy in their biographer. Dr. Smith's long Indian experience and practical literary skill, and still more his Christian and missionary sympathies, have all lovingly combined to give the Church two lives which will be long prized. Down even to the typography and indices everything is worthy of the noble men, whose life and work are made to live before us. We trust that the life of a still greater man, Lord Lawrence, may fall into as competent hands. In Dr. Duff's case, at least, there was ample material. Duff was a voluminous correspondent and journal-writer. His pen was as ready and full as his tongue. A manuscript diary of 960 closely-written pages, containing the record of a four months' tour

of missionary inspection in South India in 1849, and chronicling minutely everything which struck the traveller in the condition of the people, the country, and the churches, is a sample of what was going on all his life. This journey is condensed by Dr. Smith into forty pages. The life of a recluse student told at such length would be monotonous. But Duff was no recluse. His activity was incessant. He traversed India north and south, visited America and Canada, often toured through Europe, visited every presbytery, almost every parish in Scotland. His life, therefore, constantly introduces us to new scenes and

persons.

Dr. Duff's birthplace was a farmhouse, near Moulin, in the neighbourhood of the Pass of Killiecrankie, the date April 25, 1806. The bracing Highland climate did much to feed the exuberant physical energy which carried him through a long life of ceaseless activity, while Highland scenery and song did as much to stimulate the exuberant imagination which he used to such good effect in the service of India. It is characteristic that Paradise Lost was an early and lifelong favourite. Dr. Smith claims Charles Simeon as Duff's spiritual grandfather. It was in this way. The most eminent of the Evangelical Fathers during a Scotch tour was detained by indisposition at Moulin, and while there was the means of converting the parish minister, Dr. Stewart, from Moderatism to earnest Christianity. Dr. Stewart was instrumental in the conversion of Duff's father, and to his father more than to any one else the missionary ascribed his first religious impression. It is characteristic also that the proximate cause of religious decision in his case was a terrible dream of the day of judgment, which led him to seek and find the pardon of sin. About a year afterwards he had another dream, as glorious as the former was terrible, in which the Divine voice seemed to say, "Come up hither; I have work for thee to do."

Another determining factor in his life was the influence of Dr. Chalmers, under which he came at St. Andrews. "The greatest Scotsman since Knox," as Dr. Smith justly calls him, brought not only his fame as a pulpit orator, but his burning enthusiasm and large heart to his work as Professor of Moral Philosophy at St. Andrews; and Duff's was not the only youthful soul that took fire. From the Students' Missionary Society, beside Duff, Nesbit, Adam,

Mackay, and Ewart all went to India. More than any one else. Dr. Duff reminds us of Chalmers's temperament and style. He has the same facility of unlimited expatiation. There is the same Jove-like resonance in the periods. Conscious imitation no one ever hinted or suspected. The nower of unconscious influence could scarcely have a more striking illustration. His college-course finished, response to an appeal by Dr. Inglis, Convener of the Missionary Committee of the Church. Duff volunteered in 1829 for India, to which his soul was first drawn by the article on "India" in the Edinburgh Encyclopædia. So slight and yet manifold are the causes determining even memorable careers. The Scotch Church was indeed fortunate in finding one so well fitted by natural and acquired gifts, by faith and quenchless zeal, to become the real founder of its foreign missions. With a sagacity that was remarkable in so young a man he stipulated that he should be unfettered in his modes of operation, and be independent of the Scotch Chaplaincy and Kirk at Calcutta.

Setting sail with his bride-wife in October, 1829, it was May, 1830, before he reached Calcutta. He was twice shipwrecked on the way-once on the coast of Africa, the second time at the mouth of the Hooghly, on the first occasion losing library and everything but a Bagster's Bible and Scotch Psalm-book. Never was the science of omens more completely falsified. The course so inauspiciously opened was exceptionally successful. Coming with organising genius to a field where organising work needed to be done, he never seems to have known the heartbreak of serious failure. He lived to see a plentiful harvest wave where he had broken the first clod. Of a sanguine temperament, he dwelt at the farthest remove from the gloom which comes of brooding. All that we can do here is slightly to touch on the more salient points of so multifarious a life.

The work on which Dr. Duff's fame will rest is the inauguration of English education for the higher classes of Hindu youth. His labours in other fields, indeed, were enough to tax the energies of several ordinary men. Nothing affecting the temporal, social, intellectual condition of India was foreign to him. But his main work lay in founding the English-school system. For many years the best part of every day was given to the drudgery of teaching. The only restriction laid on him by the

Home Committee was that he should not begin work in Calcutta. This restriction he saw at once he would be compelled to disregard. He had no sooner set foot in Calcutta than he was convinced that Indian like Roman and Greek, heathenism must be attacked in its chief seats. The young missionary did not act without inquiry. Six weeks, during the hottest of the hot season, he spent in visiting every missionary and mission-station in and about Calcutta, every school and preaching-place, noting everything. His two conclusions were that Calcutta must be the scene of his labours, and that the method must be different from the methods hitherto pursued. Carey was the only one who agreed with him. The visit of the young to the aged missionary is full of interest. "He had left to the last the aged Carey-then within three years of the close of the brightest of missionary careers up to that time -in order that he might lay his whole case before the man whose apostolic successor he was to be, even as Carey had carried on the continuity from Schwartz, and the baptism of the first Protestant convert in 1707. Landing at the college ghaut one sweltering July day, the still ruddy Highlander strode up to the flight of steps that leads to the finest modern building in Asia. Turning to the left, he sought the study of Carey in the house—' built for angels,' said one, so simple is it—where the greatest of missionary scholars was still working for India. There he beheld what seemed to be a little, yellow old man in a white jacket, who tottered up to the visitor, of whom he had already often heard, and with outstretched hands solemnly blessed him. The result of the conference was a double blessing, for Carey could speak with the influence at once of a scholar, who had created the best college at that time in the country, and of a vernacularist who had preached to the people for half a century. The young Scotsman left his presence with the approval of the one authority whose opinion was best worth having. The meeting, as Duff himself once described it to us, was the beginning of an era in the history of the Church of India which the poet and the painter might well symbolise." Nineteen years later. Duff stood before the grave of Schwartz at Tanjore, with emotions which may be well imagined and which he describes in his own characteristic way.

Up to the time of Duff's arrival the agencies employed had been the common ones in use in every country. But

these had failed to touch the higher classes of Hindoo society. At the same time these classes, especially in Calcutta, were eager for a knowledge of the English language. Duff said to himself: "Why not impart English and Christianity at the same time?" His idea, briefly put, was the evangelisation of the higher classes through the English language. It is difficult to avoid the appearance of comparing one agency with another; but this was not I aff's intention, as it is not the intention of friends of Er glish education in India now. The English school was designed to be strictly supplementary, to fill a gap left by all other agencies, and also to be strictly evangelistic. Christian was never made secondary to secular teaching. "While religion was thus to be in the forefror t, his resolution was, from the first, to teach every variety of useful knowledge; first in elementary forms, and as the pupils advanced, in the higher branches, which might ultimately embrace the most advanced and improved studies in history,—civil and sacred,—sound literature. logic, mental and moral philosophy after the Baconian method, mathematics in all departments, with natural history, natural philosophy, and other sciences. In short, the design of the first of Scottish missionaries was to lay the foundation of a system of education which might ultimately embrace all the branches ordinarily taught in the higher schools and colleges of Christian Europe, but in inseparable combination with the Christian faith and its dostrines, precepts and evidences, with a view to the practical regulation of life and conduct. Religion was thus intended to be, not merely the foundation upon which the superstructure of all useful knowledge was to be reared, but the animating spirit which was to pervade and hallow all, and thus to conduce to the highest welfare of man in time and for eternity, as well as to the glory of God." If the idea required genius to conceive, it none the less required iron determination to carry out. Wise heads were shaken. and many gloomy predictions nttered. One of the innovator's best friends said: "You will deluge Calcutta with rogues and villains." It was well that he had stipulated for unfettered action.

Like every great idea, the new system had much wider results than the originator dreamt of. Duff's school had great influence in leading Government to adopt English as the instrument of the higher education of India. The missionary must hold on his course whatever Government may do or not do; but the purely secular system, which the Government has thought it imperative to adopt, strengthens a hundredfold the necessity for the English mission-school. The rigid secularism of Government education is utterly subversive of Hindoo faith, and at the same time sweeps away every traditional moral restraint, while providing no substitute. The good of such a system is far from being unmixed. Dr. Duff, with other missionaries, never ceased to condemn and deplore the absolute exclusion of moral teaching from Government institutions, and did his best to provide an antidote.

Mr. Duff began with five lads, in a hall procured for him by Rammohun Roy, and the school was formally opened July 13, 1830. Such was the origin of a movement which has since extended to all churches, and covered India with centres of missionary teaching. Duff had to begin with the elements, to drill in the alphabet, prepare school books,-" which held their place in every Christian English school in Bengal for the third of a century."—and strike out new methods of teaching. His invariable practice was to appeal to the understanding as well as to the memory, and call thought into action. He would begin with the letter "O," then add "X." Nothing could exceed the delight of the first scholars at learning the name of the animal which is far more to India than the horse to England. They would accost the driver of the first cart with shouts of "o-x, ox." The work grew with amazing rapidity. Calcutta was wild with excitement at the new career suddenly opened to native life. The first examination, presided over by Archdeacon Corrie and duly reported in the papers, completed the triumph, and made Duff master of the situation. Hundreds of applicants had to be refused for want of room and means. The school developed into a college with 900 students, the parent of innumerable daughters. The curriculum broadened and deepened. In all its stages Duff remained the same hightoned, enthusiastic teacher, with the same capacity for communicating his own spirit to others as his own greater teacher at St. Andrews. Compare the beginning with the syllabus of the highest class in 1843, as given by the Rev. Lal Behari Dey. "In Theology: the Bible, Scriptural doctrines with textual proofs, Greek Testament, Taylor's Transmission of Ancient Books, Paley's Hora

Paulince. In English: Milton's Paradise Lost, Young, Bacon's Essays and Novum Organum, Foster's Essays. In Psychology: Brown's Lectures, Whately's Logic and Rhetoric. In Mathematics: Analytical geometry, spherical trigonometry, conic sections, the differential calculus, optics. In Physics: Geology, magnetism, steam navigation. In Sanscrit: The Mugdhaboda. In Persian: The Gulistan and Bostan." It is amusing to hear of Hindoo students quoting against caste Burns's lines:

"For a' that, and a' that,
It's comin' yet, for a' that,
That man to man, the world o'er,
Shall brothers be, for a' that."

Soon the cry was heard outside, "Hindooism in danger." The first fears and prejudices against Christianity were overcome by dint of tact and patience. But when whisperings of doubt respecting Hindooism grew into professions of unbelief, there was great commotion. A native paper, rejoicing in the suggestive name of Chandrika. " Moonshine," denounced the school, and recommended the excommunication from caste of all attending it. One morning, instead of 300, only half a dozen scholars made their appearance. The panic blew over in a week, to be renewed from time to time on every fresh case of conversion. Of the first four converts, two had been students in the Government College. Made infidel by secular teaching, they were won to the faith by lectures which Mr. Duff instituted for the benefit of English students generally. The confession of one of these, Mohesh Chunder Ghose, delivered in the missionary's house before a large company, is a typical one. "A twelvemonth ago I was an atheist, a materialist, a physical necessitarian; and what am I now? A baptised Christian. A twelvemonth ago I was the most miserable of the miserable; and what am I now? In my own mind, the happiest of the happy. What a change! How has it been brought about? The recollection of the past fills me with wonder. When I first came to your lectures, it was not instruction I wanted. Instruction was the pretext; a secret desire to expose what I reckoned your irrational and superstitious follies, the reality. At last, against my inclinations, against my feelings, I was obliged to admit the truth of Christianity. Its evidence was so strong that I could not

resist it. But I still felt contrary to what I thought. On hearing your account of the nature of sin, and especially sins of the heart, my conscience burst upon me like a My soul was pierced through with horrible reflections and alarms: it seemed as if racked and rent in pieces. I was in a hell of torment. On hearing and examining further, I began, I know not how or why, to find relief from the words of the Bible. What I once thought most irrational, I soon found to be very wisdom: what I once hated most, I soon began to love most; and now I love it altogether. What a change! How can I account for it? On any natural principle I cannot, for every step that I was made to take was contrary to my previous natural wish and will. My progress was not that of earnest inquiry, but of earnest opposition. And to the last my heart was opposed. In spite of myself I became a Christian. Surely some unseen power must have been guiding me. Surely this must have been what the Bible calls 'grace,' free grace, sovereign grace; and if ever there was an election of grace, surely I am one." The second of the two converts from unbelief was Krishna Mohun Baneries, since known as a Christian minister of eminent gifts and character. The accounts given of converts from the English institution are deeply interesting. Mahendra was a great favourite with Dr. Duff for his choice gifts of mind and heart. Removed from missionary influence to the Government College, his Christian convictions were too strong to be effaced or stifled, and he became a minister of Christ. He was the gold medallist of his college, and his meek, gentle spirit was as admirable as his intellectual Like Mahendra, two other converts, Kailas and Madhub, were early taken to heaven. Four who became ordained ministers of the Free Church, of no mean order, were the Revs. Jagadishwar Bhattacharya, a Brahman of the Brahmans, and chosen by Lord Northbrook to give evidence before a Commons Committee; Prasunna Kumar Chatterjea: Lal Behari Dev: and Behari Lal Singh. "With a joyful catholicity Dr. Duff gave Krishna Mohun to the Church of England, Gopinath to the American Presbyterians, Anunda to the London Mission, and Behari Lal to the English Presbyterians. Of the twelve converts up to 1843 not the least brilliant fell; while we shall see Gopinath witnessing a good confession in his hour of trial in the Mutiny."

The English-school system has at least been as fruitful in producing native ministers as other agencies, and this is the real test of efficiency. The Scotch missionaries, feeling, as all their brethren of other Churches do, that India must be converted by native agency, have devoted themselves exclusively to English education with a view to secure this result. Their converts, if not very numerous, have been mostly of the highest character. Dr. Duff says truly: "While the salvation of one soul may not in itself be more precious than that of another, there is a prodigious difference in the relative amount of practical value possessed by the conversion of individuals of different classes, as regards its effect on society at large. It is this consideration, duly weighed, which explains the immense relative importance of the conversions that have taken place in connection with our several institutions at Calcutta, Madras, and Bombay. The number has been comparatively small. But the amount of general influence excited thereby must not be estimated according to the number. The individuals converted have belonged to such classes and castes that the positive influence of their conversion in shaking Hindooism and convulsing Hindoo society has been vastly greater than it might have been if hundreds or even thousands of a different class or caste had been added to the Church of Christ."

It seems scarcely credible now that there was over a party which advocated the adoption of Sanscrit as the vehicle of higher education in India; but the party was powerful, and the battle on the subject keenly contested. The use of Latin instead of English in all English grammar schools and colleges would be wise and practicable in comparison. Although Sanscrit is the classic of India, it is far more difficult of acquisition and far less generally known than Latin in England. Macaulay and Charles Trevelyan fought on the same side as Duff. The former summed up the argument in the following conclusions: "Being free to employ our funds as we choose, we ought to employ them in teaching what is best worth knowing: that English is better worth knowing than Sanscrit or Arabic; that the natives are desirous to be taught English and are not desirous to be taught Sanscrit or Arabic; that neither as the languages of law nor as the languages of religion have the Sanscrit and Arabic any peculiar claim to our encouragement; that it is possible to make natives of this country thoroughly good English scholars; and that to this and our efforts ought to be directed." Not only Duff's advocacy, but the exhibition of the effects of English teaching in actual experiment helped Lord Bentinck to come to a right conclusion, and on May 7, 1835, a Minute was issued deciding in favour of English. That decision carried in it the whole future of India. The other course would have chained it to a dead past. Let it be observed that on this question, as on that of female education, mis-

sionaries were the pioneers of progress.

Duff did as valuable organising work for India at home as in India itself. He paid two prolonged visits to Scotland before his final return—one from 1835 to 1839, the other from 1850 to 1855. Driven home by sickness, he worked harder than ever in addressing meetings and organising associations. At the time of his first return missionary interest could scarcely be said to exist. Information had to be diffused and the conscience of the Church aroused. The general anathy was well expressed in the conduct of Duff's own Home Committee. He had been induced to give an address to a select company invited to hear him in a private house in Edinburgh. The Committee was shocked at the irregularity, and summoned the culprit to give an explanation. When the Committee met the convener took his stand in the middle of the floor, and proceeded to dilate on the misdemeanour of which Mr. Duff had been guilty, and characterised it as even dangerous in those revolutionary days. The incriminated missionary advanced to the middle of the floor and made his defence, alleging that the meeting was not of his seeking, and that while he was the servant of the Committee he was so freely and on reasonable terms, and, further, that exceptional means were necessary to dissipate the general The effect was apathy on the subject of missions. "Instantly, all present, without any one of them uttering a single word, went out precipitately, leaving Mr. Duff and the convener alone in the middle of the room to look at each other in a sort of dumb amaze-'Probably,' said the former with great calmness, 'we have had enough of the subject for this day.'" In 1831 Dr. Inglis had raised his hopes so high as to calculate on receiving £1,200 from the annual collection to be made. "Not £1,200, but £12,000," wrote back Mr. Duff from Calcutta, "and do not stop at that." In 1835 Duff found

that a member of committee had scribbled on the margin of his letter, "Is the man mad? Has the Indian sun turned his head?" The annual missionary collection in

the three Churches now yields £100,000.

Duff leaped into fame as a missionary orator by his address in the General Assembly of 1835, which "set Scotland on fire." It was no mean achievement to move such an assembly, from the Moderator to the youngest licentiate. The position which he then took as a speaker was maintained to the last. A critical reader might complain of redundancy of ideas and words; but delivered, as his speeches were, with all the energy of living conviction, the effect was overwhelming. Duff studied carefully the masterpieces of Pitt. Fox, Grattan, Brougham, and, still more, Chalmers. But these are only partial explanations of the secret of his power. The whole man-body, mind, and soul-was in every sentence. His heart burned with the grandeur of his theme. India—India degraded by idolatry, elevated by Christianity-filled his thoughts by day and night. And what he saw and thought and felt he had the power of making others see and think and feel to an extraordinary degree. He educated the Scotch, and to a certain extent the English, Churches to a sense of the responsibility cast upon this country by its splendid empire in the East. He projected the idea of visiting every Scotch presbytery for the purpose of addressing meetings and organising associations, and accomplished it in two winters, often addressing several meetings in one week and travelling in all sorts of weather. The man who did all this was not thirty years old. We have a sort of digest of the material dealt forth in these speeches in his book published under the title of India and Indian Missions. The writer of this notice well remembers the impressions made on his own mind many years ago by its flaming appeals and living descriptions. It would pay the missionary societies to keep the book constantly in print.

On his second visit home, in 1850, he had to do all this work of travelling, speaking, organising, over again. The Disruption had intervened, consigning all the resources gathered at such cost to the Establishment. The amount of property retained in Calcutta was £10,000, in Bombay £8,000, exclusive of libraries, &c. In India as in Scotland the Free Church, to which Duff and his colleagues adhered, had to begin from the foundations. The details

given of this second speaking campaign afford much insight into Scottish life and character. During the same period he paid a four months' visit to America, where his impassioned earnestness carried everything before it. In 1851 he was raised to the Moderator's chair, the first mis-

sionary who had sat in it.

During his second and third terms of Indian service he had less uphill work than at first. He was supported by likeminded and efficient colleagues, and had to do little more than extend and perfect on the lines already laid down. His colleagues were W. S. Mackay, Ewart, Macdonald, and T. Smith, all men of the highest efficiency. The advance between 1830 and 1841 was such as to call forth wonder and gratitude from the missionary's heart. "Then," he writes, "I had no commission but either to hire a room for educational purposes at a low rent, or to erect a bungalow at a cost not exceeding £30 or £40; now, there stood before me a plain and substantial, yet elegant. structure, which cost £5,000 or £6,000. Then, it was matter of delicate and painful uncertainty whether any respectable natives would attend for the sake of being initiated into a compound course of literary, scientific, and Christian instruction; now, 600 or 700, pursuing such a course, were ready to hail me with welcome gratification. Then, the most advanced pupils could only manage to spell English words of two syllables, without comprehending their meaning; now, the surviving remnant of that class were prepared to stand an examination in general English literature, science, and Christian theology, which might reflect credit on those who have studied seven or eight years at one of our Scottish colleges." This is only a type of the progress in every department of social life; and since 1841, when these words were written, the advance has been far more marvellous.

Very interesting details are given of the Indian Church during the Mutiny, the names being given of ten catechists, some with families, who, faithful unto death, received the

crown of life.

In 1863 Dr. Duff left India finally, driven away by illness and symptoms which he durst not ignore. All classes joined to do honour to the departing missionary. Two Duff scholarships were established in the University. A marble bust was placed in the hall of his own Institution. A few Scottish merchants of India, Singapore, and China

offered him £11,000. The capital he devoted to invalided missionaries, himself living on the interest for the rest of his days. The farewell addresses presented would fill a volume. His reply to the Bethune Society, which represented educated non-Christian Bengal, closes thus: "Wherever I wander, wherever I roam, wherever I labour, wherever I rest, my heart will still be in India. . . . And when at last this frail mortal body is consigned to the silent tomb, while I myself think that the only befitting epitaph would be, 'Here lies Alexander Duff, by nature and practice a sinful, guilty creature, but saved by grace, through faith in the blood and righteousness of his Lord and Saviour Jesus Christ; were it, by others, thought desirable that any addition should be made to this sentence. I would reckon it my highest earthly honour, should I be deemed worthy of appropriating the grandly generous words, already suggested by the exuberant kindness of one of my oldest native friends, in some such form as follows: 'By profession a missionary: by his life and labours, the true and constant friend of India.'"

We must not follow him to the thirteen years and more of comparative rest, until one day in February, 1878, all Edinburgh, in its civic functionaries, University professors and students, the Moderators of the three kirks, and representatives of English, American, and Indian Churches, along with vast crowds, followed to the grave one whose motto had ever been, "Whatsoever thy hand findeth to do, do it with thy might."

Very interesting are the notices of the sympathy extended to the missionary by Christians in high position. Sir James Outram, called, not without reason, "the Bayard of India," was awarded £3,000 as his share of the Scinde prizemoney; but refusing to touch what he called "bloodmoney," when Government would not retain it for the dispossessed Ameers, he distributed it among charitable institutions. He applied to Dr. Duff respecting the application of a balance of £300. It was just after the Disruption, when the Free Church sorely needed help. Dr. Duff mentioned a place where a school was wanted, and received the money at once with the message, "What a pity I did not know of this earlier; otherwise, for such objects of which I highly approve, you might have got the whole of the money." "When next he visited Calcutta, where Lord Dalhousie saw in him a kindred spirit, he spent a

Saturday in the Institution. The man whose courage as a soldier and a statesman rose almost to madness, stipulated that he should not be asked to make a speech." On board the Lady Holland, which took them to India in 1829, the Duffs met with a young engineer lieutenant, H. M. Durand, even then a decided Christian, and afterwards second only to the Lawrences in lofty character and governing ability. Durand and Duff were always firm friends; and it was a sorrowful day, in 1871, which brought the missionary tidings that the soldier-statesman, who had just been made Lieutenant-Governor of the Punjab. had been killed by an accident. It was the Christian life of Sir Donald M'Leod, another administrator of the same school, which ripened to decision the convictions of truth which the Rev. Behari Lal Singh had received in Dr. Duff's college. "If all Christians were like Sir Donald M'Leod," a Sikh said. "there would be no Hindoos or Mohammedans." General Colin Mackenzie, one of the heroes of Afghanistan, who with his wife had shown no little kindness to Dr. Duff in India, sent a message to him on his deathbed. "That's true Christianity," said the dying missionary; "give my intense and warmest love to him and his wife. His manly heroic bearing always appeared to me an incarnation of the ancient heroes Christianised." Sir Henry Lawrence, that perfect type of Christian chivalry, used to spend his income beyond a mere sustenance on philanthropic objects in India, and Duff's work shared in the bounty. In 1850 the missionary was Sir Henry's guest at Lahore, and had much intercourse on subjects touching India, equally dear to both. Dr. Duff preached in the great hall of Government House to two hundred ladies and gentlemen, civil and military. Lord. Lawrence visited Dr. Duff's Institution in state, just as he had inspected the Government Colleges and University. thus carrying out his own sentiments as expressed to Lord Canning. We must quote some of his golden words. "Sir John Lawrence does entertain the earnest belief that all those measures which are really and truly Christian can be carried out in India, not only without danger to British rule, but, on the contrary, with every advantage to its stability. Christian things, done in a Christian way, will never, the Chief Commissioner is convinced, alienate the heathen. About such things there are qualities which do not provoke nor excite distrust, nor

harden to resistance. It is when unchristian things are done in the name of Christianity, or when Christian things are done in an unchristian way, that mischief and danger are occasioned. The difficulty is, amid the political complications, the conflicting social considerations, the fears and hopes of self-interest, which are so apt to mislead human judgment, to discern clearly what is imposed on us by Christian duty, and what is not. Having discerned this, we have but to put it into practice." The following incident is nobly characteristic. "When Lord Canning. in the year after the Mutiny, was about to make his triumphal march through the Punjab on any or every day of the week, as he had done through Hindostan, he received with silent courtesy the rebuke contained in the example of John Lawrence, and thenceforth no tent was ever again struck on a Sunday in the Viceroy's camp."

Wilson's is a most fascinating biography, one of those which a reader wishes to read through at a sitting, and closes with regret. Perhaps something of this is due to the care and ability with which it is written. Here, too, as in the former case, the biographer writes, so to speak, from within, from intimate acquaintance not only with the immediate subject, but all its surroundings. But far more is due to the intrinsic charm of the life portrayed. Wilson's is a character not merely to respect and admire, but to love. Scholarship, courtesy, religion, missionary zeal, all met and blended in him, and all were equally conspicuous and perfect. Taking the whole Presidency as his field, he knew the people and country as none else had ever done. There was no class of the community— English, Hindoo, Mohammedan, Parsee, Jew-for whose good he did not labour. His vast knowledge and high character made him universal referee. Government again and again sought his opinion and counsel. While one Governor after another came and went, Wilson made Bombay his home from his first coming in 1829 till his death in 1875, the only breaks being one of four years at home between 1843 and 1847, and another of one year when he returned to take the Moderator's chair. We may safely say that no one who ever landed on the soil of the Bombay Presidency has left on it so deep and lasting a mark. His knowledge seemed universal, including physical science, Eastern philology and religion, and the vernaculars. While Maratha was his principal language, he knew Goojeratha, Hindostance, and Portuguese as well. Persian, Sanscrit, and Arabic were at his command for use among the learned, and did him good service. One is apt to suspect such extensive knowledge of being superficial, but such, we are assured, was far from being the case. He was in constant correspondence with and enjoyed the respect of the best Orientalists in Europe. The Royal Society of England does not open its doors to sciolists.

There were great differences in methods of working between Duff and Wilson. In Bombay there was less scope for English teaching than in Calcutta and even Madras. Perhaps one reason is that the individuality of Mahratta character is much more sturdy than in the case of the Bengali and Tamulian. Accordingly Wilson's English work was a very subordinate part of his life. He was the prince of native subscionaries—a vernacular missionary of the highest type, one whose popular labour rested upon profound study of native literature, and faith, and character.

While Duff was a Highlander, Wilson was born at the Lowland burgh of Lauder, in Berwickshire, Dec. 11, 1804. His first religious convictions were due to a pious grandfather. His first missionary and Indian bias arose from intercourse with pupils who were the sons of an Indian colonel, and with a retired Indian general in the neighbourhood. This bias was deepened during his university course in Edinburgh, where he was the founder and secretary of a Students' Missionary Association, wrote a life of John Eliot. Apostle of the Indians, and was greatly moved by the careors of Brainerd and Martyn. The part of his university course of most service to him afterwards was the training in physical science under Sir John Leslie. Another valuable part of his equipment was a knowledge of medicine acquired in a year's attendance on the classes in medicine and surgery. During these years he was noted for a blameless, gentle character, which again rested upon deep spiritual religion. The biographer mentions a timestained paper, still in existence, containing the record of a personal covenant with God made at the close of his twentieth year.

All through life his proper missionary work remained supreme. Everywhere and before everything else he was a missionary and a missionary alone. He avoided everything that would have even the appearance of interfering

with this character. On this ground he declined the appointment of Oriental translator to Government. All his philological and antiquarian researches radiated from and were made to subserve his proper work. His delight was in preaching the Gospel, and he did it whenever he could get an audience—in the streets of Bombay, on journeys, to learned Brahmans, in Rajahs' courts. Dr. Shoolbred, of the United Presbyterian Mission, who travelled in his company, says, "During the whole journey, so long as he could make himself understood in Hindostance, he continued to preach in the towns and villages through which we passed; and it was only when, after penetrating into Marwar, he found the people with their uncouth dialects unable to understand him, that he was reluctantly obliged to desist. But his evangelistic efforts were not confined to these public ministrations. He no less eagerly seized every opportunity while conversing with individual natives of turning the conversation on Christ and His Gospel." Very early he was sagacious enough to see the folly of making denunciations of idolatry the staple of his addresses. He believed it far wiser and more effectual to proclaim positive truth. The following passage occurs in an early letter, and describes his own practice. "In reference to the mode of addressing the natives pursued by my brethren, I have been led to entertain and express the deepest regrets. With one exception, as far as I can form a judgment, they are too frequently inclined to speak on the folly of idolatry; and to neglect the preaching of the unsearchable riches of Christ; and to present Divine truth to the minds of the heathen in any manner which is destitute of solemnity. I know that their temptations to pursue this course are great. It is the easiest; it excites the feelings of the hearers without any difficulty. It is, however, unprofitable. It is deceitful; a missionary falls into it without being aware of it. It tempts to the use of inconclusive arguments; it excites a thousand unprofitable objections; it produces a bad impression on the heathen, and destroys a missionary's temper. It is the bane of our mission, and I believe the great cause of the comparatively small success of modern missions." The writer might have added apostolic example in the Acts.

At the same time Wilson never shrank from controversy when it became necessary. His complete mastery of the

various religious systems of India made him a formidable antagonist, while his kindliness and courtesy disarmed all bitterness. His controversies upon Hindooism were oral, with Parseeism and Mohammedanism in writing. As early as 1830 there was a four days' discussion in his house between a Christian and Puranic Brahman on such questions as the nature of God, the relation of morality to religion, the origin and the means of getting rid of sin. The Christian Brahman, Rama Chundra, soon gave place to Mr. Wilson, who continued the discussion. Shastroe brought forward the usual argument of a king being above law. "Cannot a king do what he pleases? Cannot he go into the bazaar and carry off what he pleases? Who can call in question his doings?" Mr. W. "This is one of your modes of explaining the actions of Krishna. A king by his power may prevent inquiry into his conduct; but can assuredly sin." The Hindoo fondness for arguing by illustration comes out everywhere. Mr. W. "Are the idols like God?" Shas. "Not so; but if obeisance is made to the shoe of a king in the presence of his servants, and they bear the intelligence to the king that such a one has great respect for him, for he every day comes and makes obeisance before his shoe, would you not consider this as paying respect to the king? So is it in worshipping the Deity by the idol." Mr. W. "By this reasoning you make God at a distance; and we say that God is everywhere present. Is God, then, in the idol?" Shas. "Yes, in everything." Mr. W. "You say that God is in a particular manner in the idol, and that He is brought in by the Muntras: but if a Mussulman touches it. He goes out!" Hindoo-like, the Christian Brahman often replied by illustration. When the Shastree urged the need of Krishna as a mediator, Rama Chundra replied: "Suppose I am hungry, and have a handful of rice; if I throw that direct into the fire it will be burnt up, and I shall lose my food; but I must have a vessel to put it in, and that it may be put on the fire and be cooked; but suppose the vessel I select is a dirty one, or a cracked one, then my rice will be spoiled in cooking, or the water will escape, and it will not be cooked; and in either case I shall remain hungry. I must then be careful that I select a proper vessel. So must it be with your Avatara (incarnation)." The following is an ingenious defence of the efficacy of ablutions. We commend it to Ritualists. "I hold that by the performance of ablution the mind is washed; for all evil proceeds from evil thoughts; and by the performance of ablutions morning and evening I am brought to think of this, and thereby a check is put on evil thoughts, and so the mind is purified." The Pundits were the first to beat parley. Another Pundit took up arms and continued the combat six nights longer, but fared no better than his friends. The discussions were published, and made no little stir. A tract in defence of Hindooism called forth Wilson's two Exposures of the Hindoo Religion, which are "models of kindly controversy and lofty courtesy." He quoted largely from Sanscrit authorities. The Exposures were translated into several Indian vernaculars and proved of great service.

A remark of Mr. Wilson's, in a letter on Parseeism. provoked a Mohammedan Moulvie to publish a Defence of the Islamic Faith, which called forth a Refutation of Mohammedanism from Mr. Wilson. The latter was the first publication in India on the subject, and was the precursor of Pfander's treatises, which have led to many conversions. In October, 1833, Mr. Wilson baptised a fakeer, the first Mohammedan baptised in Bombay, and soon afterwards a young and learned Moolla. Dr. Smith says: "The law of polygamous marriage and treble divorce has never been interfered with by the British Government among the forty millions of its Mussulman subjects in India, while not a few Hindoo criminal practices, like widow-burning, child-murder, hook-swinging, and human sacrifice, all in the name of religion, have been ruthlessly stopped. The result is such a horrible state of society among the Mussulmans of Eastern Bengal, as was revealed in an official inquiry in 1878, and which still goes on corrupting under the ægis of the Koran and its expounders." The following passage occurs in the account of Wilson's voyage home in 1848. "As the Cleopatra skirted the southern states of Arabia. Makulla came in sight, recalling the horrors of the slave-trade, of which it continued to be an infamous emporium till 1873. There Capt. Haines had seen seven hundred Nubian girls at a time, subjected in its slave-market to the disgusting inspection of the Mussulman sensualist, to be smuggled into the native states of Kathiawar."

Wilson's greatest fame was acquired in the controversy with the Parsees, who are peculiar to Bombay, and of whom

the biography contains an interesting account. Here he broke quite new ground. The discussion was carried on both by newspaper and pamphlet. Our champion of Zoroastrianism called himself "Nauroz Goosequill," but presently altered the dubious pseudonym to "Swanquill." There are different sects, Pharisees and Sadducees, among Parsees. Goosequill or Swanquill was disowned by the high priest for having denied that the cosmogony, which Wilson had assailed, was part of the Parsee scriptures. Wilson's replies were at last embodied in a lecture on the Vandidad. which led to several conversions. The reforming Parsees adopted the position that "the names of the dual principles, Hormuzd and Ahriman, are purely parabolical, that they have an esoteric meaning not intended for the ignorant, and that the childish and worse than Talmudic miracles ascribed to Zoroaster are as well authenticated as those of Christ." So another Parsee champion made Ahriman a mere personification of the evil qualities inherent in man. Wilson's spirit may be illustrated by the following. appears wonderful to the Zoroastrian that God should have so loved the world as to give His only-begotten Son, that whosoever believeth in Him should not perish, but have everlasting life. If he will inquire into the evidences of Christianity, which are neither few nor small, he will find that what is wonderful in this instance is also true. If the Zoroastrian will reflect on the nature of sin, he will perceive that it is an infinite evil; that no efforts of his own can of themselves remove that sin which has been already committed; and that, if salvation be obtained at all, it must be through the merit of a Divine substitute. Christ, he will find on inquiry, delivers from the punishment of sin, and saves from the power of sin, all who put their trust in His name. Men's works are imperfect in every case, and in many instances positively sinful; and if the Zoroastrian looks to his works for acquittance, he will be miserably disappointed." The Parsees boasted that the conversion of Parsees was an impossibility; "even a Parsee babe, crying in the cradle, is firmly confident in the venerable Zartusht." The reply to this was the application, in 1839, of three Parsee students for baptism, two of whom are still ordained ministers. In 1856 four Parsee students of the secular Government College applied for baptism, saying, "We are fully convinced by the grace of God that Parseeism is a false religion, and consists of vague and extravagant VOL. LIV. NO. CVII.

principles. It is the invention of man, not the revelation of God. . . . Nothing has led us to join the Christian Church but the pure hope and desire of the salvation of our souls." After several days' argument and persuasion, they were induced to return home by the assertion that their mothers were dying, and the promise of religious liberty. Only one remained faithful to his convictions. Wilson's greatest published work is his Parsi Religion, as contained in the Zand-Arasta, and Propounded and Defended by the Zoroastrians of India and Persia, Unfolded, Refuted, and Contrasted with Christianity. Wilson "was the first English scholar to master the original Zand texts, according to the admission of the 'irritabile genus' of pure Orientalists, as represented by the late Dr. Haug, who would in no wise give credit to his German rival, Spiegel, the present able

representative of Zand scholarship in Europe."

A most interesting account is given of an exposition of Christianity which Wilson was able to give to the Gaikwar of Baroda on a tour in 1835. The tact displayed was consummate, and of course no little tact was necessary. Wilson proceeded to an audience along with the Political Commissioner and other British officers. After the usual conversation about the weather, Mr. Wilson asked permission to give an account of Christianity, the religion of Great Britain. Permission being given, Mr. Wilson described the character of God, the state of man, and the means of salvation, contrasting this with Hindooism. The Gaikwar then called upon his minister, Venirama, to reply. Venirama alleged that Jesus Christ was an incarnation like Rama and Krishna. Mr. Wilson then proceeded to describe the acts of Rama and Krishna, contrasting them with the Gospels. Venirama. "Don't say that the seeming evil acts of our gods were sinful. God can do what He pleases, and who is to call Him to account?" J. W. "God is not responsible to any, but He will act always according to His nature, which is perfectly holy. Even Krishna is represented in the Geeta as admitting the propriety of his regarding moral observances: 'If I were not rigorously to observe these, all men would presently follow my example.' Judging Krishna by what is here said, I am bound to condemn him." Ven. "God can sin; He is the author of all sin." J. W. "Do not blame the Self-existent." Ven. "This is no blasphemy. If God is not the author of sin, pray who is the author of it?" J. W. "The creatures of

God are the authors of it. You must admit that God has given a law to men. Ven. "I do admit this, and say that this law is good." J. W. "Now, I make an appeal to his highness. Will the Great King first make laws for His subjects, then give them a disposition to break those laws. and last of all punish them for breaking them?" Gaikwar (laughing heartily). "Verily I will do nothing of the kind. I am always angry when my subjects break my laws." J. W. "And is not the King of kings and Lord of lords angry when His laws are broken? Why does He send disease and death into the world, and why has He prepared hell unless for the punishment of the wicked?" Ven. "I know not: but who is there to sin but God? He is the only entity." J. W. "So, I suppose, you have no objection to say Aham Bramhasmi (I am Brahma)." Ven. "It is not lawful for me to repeat these sacred words." J. W. "Not lawful for God to declare His own existence! You were saying a little while ago that it was lawful for God to do anything, even to sin." The Gaikwar complimented Mr. Wilson on his pure accent. As for himself and his ministers, he said, they knew something about this world, but little about the other. He declined to accept a New Testament, as this would be an expression of dissatisfaction with Hindooism. He afterwards, however, requested it to be sent privately. Mr. Wilson sent it along with a respectful letter in Maratha, which concluded thus: "Why should I say more? That your highness may long hold the umbrella of protection and shelter over a happy people, and enjoy every blessing in this world and that which is to come, shall ever be my most fervent prayer to Almighty God."

There was a similar scene at Holkar's court in 1860. Holkar summoned a number of Brahmans to meet Mr. Wilson. Mrs. Wilson says: "Holkar sat in a chair at the end of a long table. At one side sat his prime minister, then Dr. Wilson and myself, and some of his courtiers. On his other side sat a row of learned pundits and Brahmans. At Holkar's request Dr. Wilson and they entered into a discussion on the sacred books of the Hindoos and other kindred subjects. They got quite frightened when my husband repeated some Sanscrit quotations, and when they saw how well prepared he was to argue with them, and to point out the absurdities of their system. Holkar and some others who were present seemed to enjoy their discomfiture."

Dr. Wilson says: "He was evidently much disappointed by the appearance made by the Brahmans. They put several questions to me, which the Maharaja declared to be inapt: and he himself took their place, boldly asking, 'Why do you kill animals?' My answer was in substance as follows: 'Maharaja, that is a question for yourself as well as me. You kill all sorts of clean animals for food, except cows. For the same reason that you kill goats, sheep, &c., I kill cows, getting suitable food from them not forbidden by God. I admire the Sanscrit language. The best word for man in it is manushya, which means, he that has a mind. The word for cattle is pashu (Latin pecu), "that which may be tied." Man is an intellectual and moral being, created for the service of God; cattle are created for the service of man. The Vedas show that the ancient Hindoos ate them, and you may eat them too. Death is not to them what it is to us. Even the pain may be very alight. Dr. Livingstone, when he was overpowered by a lion, from a sort of electrical excitement suffered no pain.' 'Yes,' said the Maharaja, 'the question is my own, and you have given a good answer to it. I am always troubled

by my friends opposite."

There is no more delightful part of the missionary's work than his periodical itinerancies for the purpose of preaching. Such tours are an excellent means for diffusing a general leaven of Christian knowledge. Dr. Wilson kept up this practice to the end of life. In such tours he found relief from the monotony of city toil, and used the leisure to clear off arrears of correspondence, as well as to carry on researches of all kinds. "The 'exposure' Mr. Wilson ridiculed, although his most fruitful tours were made at an early period, when even roads were not, and a paternal Government had not doubled its debt to develop the resources of the country by great public works. Rarely did he find a comfortable post-house, or even tolerable resting-place when out of the beaten track of military stations and civilian hospitalities. Studying nature as well as man; preaching, speaking, examining daily; keeping up the correspondence rendered necessary by his supervision of the still infant mission in Bombay; answering references of all kinds from missionaries, officials, and scholars, he found—because he made—the tour a holiday. On such tours he carried a few books in an old satchel, manuals, sometimes in manuscript, of the botany,

geology, and political relations with the feudatory princes. being as indispensable as the bundles of vernacular and Sanscrit writings which he circulated. Thus he was never alone, and every tour added to his multifarious collection of objects of natural history and archeology, to say nothing of Oriental manuscripts, on which he lectured to his students and friends. When accompanied by a brother missionary, and frequently by survey and settlement officers, like Colonel Davidson, whom he met in his wanderings, he proved the most genial of companions. His stores of information, old and new, interspersed with humorous anecdotes and a child-like fun. turned the frequent mishaps of jungle journeys into sources of amusement. And then, when the travelling or the preaching of the day was done, and the rough dinner was over at the tent door or in the native dhurmsala, or enclosed quadrangle, there went up to heaven the family supplication for Gentile and Jew, and dear ones near and far away. To be on tour in the glorious cold season of India, from November to March, is to enjoy life in the purest and most intelligent fashion, whether it be in the Viceroy's camp or in the more modest tent of the district civilian. To be on a missionary tour with one who thus understands the people and loves them is to know the highest form of enjoyment that travel can give." As early as 1831 he was away a ride of 400 miles, to the sacred Nasik in the north and the sources of the Godavery. His companion was a Church missionary, the father of the present Canon Farrar. In a note Dr. Smith says, "Dr. Wilson used to tell afterwards how he dandled Mr. Farrar's boy on his knee. But of his Anglo-Indian childhood, Canon Farrar assures us he has only a dim remembrance." Does the excellent Canon owe some of his vivid powers of imagination to Indian scenery? On this journey Mr. Wilson writes of the Syhadree ghauts: "As we rose from the valley a most majestic scene began to unfold itself. When I beheld hill rising upon hill, and mountain upon mountain—the sun setting in glory behind the towering clouds—the distant ocean, forests, rivers and villages and when, looking around me. I observed, amid this scene of grandeur, a single stone usurping the place of Jehovah, the Creator of all, I felt and expressed the utmost horror at idolatry, and the baseness, guilt and stupidity of man."

The second tour was eastward to Jaina and the caves of Elora. Great sanctity attaches in India to the junction of rivers, and at the junction of the Godavery and Prawara, called Prawara Sungam, Mr. Wilson and his fellow missionary found a hundred Brahmans supported by the alms of pilgrims. The Brahmans here, unlike the one in Bombay, stood up for the positive benefits of ablution in sacred streams. Mr. Wilson made a minute examination of the Elora caves, taking fifty pages of notes. The caves are of the trap formation, and show three orders of building, Jain, Buddhist, Brahmanical; the Buddhist being the most socient and the Brahmanical the most artistic.

The cold season of 1833-4 was devoted to the south and the Portuguese possessions. Many of the sacred springs are believed to come from the Ganges. Coming to one of these, Mr. Wilson read to the worshippers notes he had taken of the lectures on hydrography in Edinburgh. "His explanation was confirmed by a young English-speaking Hindoo, whom he had known in Bombay, and who had come a distance of ten miles to pay his respects to the missionary." His visit to Goa was the first missionary visit since Claudius Buchanan's. He inspected the various buildings and conversed in Latin with the priests. Before an image of the Virgin the following conversation took place. J. W. "Usus imaginum in ecclesia est contra Dei secundum mandamentum." Padre. "In Novo Testamento imaginum usus permittitur." J. W. "In quo loco permissio invenitur?" P. "Nescio, sed hoc scio, Ecclesia Romana permittit." J. W. "Ecclesia Romana permittit, et Deus interdixit." P. "Idolatria non est." J. W. "Sic aiunt Brachmanes." The padre and missionary agreed better about predestination, which both received according to Augustine's teaching. Some parish priests, however, refused an offer of Calvin's Institutiones, saying: "Non licet nobis libros hereticos legere," although they accepted a Portuguese Bible, and Latin Bible and New Testament. At Kohlapore the missionaries received almost royal honours from the Rajah, the representative of the great Sivaji, the founder of the Mahratta power. They had an escort of sepoys, received presents of fruit, sweetmeats, eggs and chickens, and were waited on by liveried servants. At the audience Mr. Wilson gave an account of the Christian Scriptures, and presented a well-bound copy of the New Testament, and the Exposure of Hindooism.

The longest and most important tour of all was the one through the Goojarata territories. Ever on the look-out

for manuscripts and books, he purchased at the Portuguese town of Daman a copy of the Vandidad Sadé and all the Parsee sacred books in the Zand, Pahlavi, and Pazand tongues, but in Goojarata characters and with Goojarata commentary and translation. At a subsequent period he obtained from one of the Bombay fire-temples a MS. copy of the Four Gospels in Arabic, which he forwarded to the Bible Society. He had observed a similar copy in the archbishop's library at Goa. He spent nine days in Surat making inquiries into the different sects of Goojarata Brahmans, Parsees, and Mohammedans. The interview with the Gaikwar has been already mentioned. Wilson visited the ancient Jain settlements of Palitana, the only previous visitor being Colonel Tod in 1822. The chief Jain peculiarity is, as is well known, a punctilious reverence for life, which has been carried as far as the Pharisaic rules about the Sabbath. The duty of one sect is to watch the direction of the wind, lest it should blow an insect into the mouth. "How many lives are there in a pound of water?" asked Mr. Wilson of one of the sect. "An infinite number." "How many are there in a bullock?" "One." "You kill thousands of lives, then, while the Mussulman butcher kills one." At Bhooi he found the Resident, Colonel Pottinger, and the memory of a good chaplain who died five years before. Originally senior master of the Edinburgh High School, and the second best teacher of Greek in Scotland, James Gray became a minister, accepted an East Indian chaplaincy. and in the solitude of Bhooj gave himself up to do good to the natives from the Rajah downwards. For four years he tried to make the Rajah "one of the most learned kings in India, as he promises to be one of the most humane." The grateful Rajah built a monument to his teacher, and, what is better, carried out his precepts. From 1833 to 1860 he was a father to his half-million of people, and his son and grandson are treading in his steps. Surely James Gray did not labour in vain! Dwarks, the scene of Krishna's orgies, also received a visit. Ten miles from the Mohammedan town of Joonagurh Wilson came upon the famous Girnar rock, covered with Asoka inscriptions, which he was the first to attempt to decipher. inscriptions mention Antiochus the Great and other Greek kings of the third century B.C. to whom Asoka sent embassies. At Wilson's suggestion a copy of the inscrip-

tions was afterwards taken by laying cloth on the rock and tracing the depressions in ink. The rock awakened as much interest among scholars like James Prinsep. Weber. Westergaard, H. H. Wilson, as the Rosetta Stone. Dr. Wilson thus describes the rock. "The rock is of granite, containing, particularly near the summit, a large quantity of mica. There is scarcely any vegetation upon it, and indeed from its steepness no possibility of the formation of a soil. The greatest temples are at an elevation, I should think, of about 3,000 feet, estimating the greatest height at 3,500. They are built of the granite, though some of the steps and staircases are formed of sandstone from the plain below. They are works of prodigious labour, and are executed in excellent taste. They are at present appropriated by the Jains, but the most ancient and remarkable of them appear to me from the Dhagob, and other arrangements, to be undoubtedly Buddhist. The most remarkable Jain images in them are those of Neminatha, not much exceeding the size of a man, black and ornamented with gold. and at present worshipped: Rishabhdeva, of a colossal size, of granite, covered with white chimam; and Paramatha. I was allowed to go through all the temples, and even to enter the shrines and measure the idols." Wilson also visited the temple of Somnath, made notorious by Lord Ellenborough's escapade. Wilson found there both a new and old temple, the former built by Ala Bai, the famous Holkar princess, the latter no doubt the one plundered by Mahmud of Ghuzni in the eleventh century. The image is a Phallic emblem. "The Mussulman conqueror might find treasure about the premises, but most certainly it was not within the god, who had neither head nor belly." Seven years later Wilson was requested by Government to report on the state of the temple. His letter, given in the Appendix, tells all that can be known of it. The Governor-General's fantastic scheme might have been carried out but for two difficulties—the gates are fictitious, and the temple is in no fit state to receive them. The public ridicule was such that the gates have lain ever since—useless lumber—at Agra. Did Lord Ellenborough read the following paragraph in Wilson's letter? "On reflecting on the present circumstances of Somnath, I see not how the gates can be conveniently disposed of, even should they reach Somnath, unless it be by planting them in some triumphal arch or monument

entirely disconnected with any of the sacred edifices of the Hindoos. The Hindoos, so far as they would make any interpretation of their being presented to any of their temples, would conclude that the gift is the voluntary homage of the British Government to their religion, and a token of our espousal of their cause against the Mussulmans, their former foes. This cannot be the design of the Right Honourable the Governor-General. His grand object is to consecrate the spolia opima to the commemoration of British and Indian valour. From what I have observed of the natives during the most intimate intercourse with them for fourteen years, I am led to the opinion that his Lordship's desires of benefit from the disposal of the gates can only be accomplished by their being kept entirely distinct from the temples. From his Lordship's late exemplary recognition of Divine Providence . . . I am sure that his Lordship would revolt from inadvertently originating any measure which would appear to him in any way derogatory to our holy faith, or adverse to that gradual divorcement from superstitious observances which is now becoming apparent throughout the bounds of our Eastern Empire. Some of the incidents of these tours were less agreeable. Once Dr. Wilson was near being stung to death by bees.

In Goojarat Dr. Wilson met with several natives who had become Christians from reading the Scriptures and Christian tracts apart from missionary instruction. being asked, "Who are you?" they at once replied, "We are Christians." They then proceeded to relate how by reading Goojarata and Maratha tracts like The Great Inquiry, and The First Book for Children, and Scripture portions, they had been led to concern for salvation and faith in Christ. On examination they showed no mean acquaintance with Scripture. The number of avowed Christians of this kind, they said, was about seven, but there were many more inquirers. There was nothing whatever to throw doubt on their story, which was quite consistent and apparently sincere. The chief speaker, Narottam, acted as a sort of minister to the rest. "I then delivered a practical address, and closed our meeting with The immediate objects of our regard were evidently much affected during the latter exercise, and they grasped my hand in the most tender manner when I ceased to address the Throne of Grace on their behalf."

Other topics, such as Dr. Wilson's labours for the Jews of

the West Coast, the Beni-Israel as they call themselves. for whose sake he composed a Hebrew-Maratha grammar. his connection with the University, of which he was for a time vice-chancellor, as well as examiner in Sanscrit. Persian, Hebrew, Maratha, Goojarata, and Hindostanee, his frequent lectures on subjects like India Three Thousand Years Ago, The Six Schools of Indian Philosophy. and others: his correspondence with Livingstone, his journey through the Desert and Holy Land on his way home, out of which grew his solid and learned book, The Lands of the Bible-we must pass by. European visitors to Bombay always expected him to be their guide in viewing the rockexcavations of the neighbourhood. "In velvet skull-cap. and with long wand, the enthusiastic scholar, with the air of an old knight, would lead his friends through the caves, pouring forth his stores of knowledge with unflagging courtesy, and charming all by the rare combination of goodness and grace, historical and Oriental lore, poetic quotation and scientific references, genial remark, and childlike humour, till visitors, like the accomplished Lady Canning, declared they had never met such a man." He was in his last illness when the Prince of Wales arrived, whose guide he was to have been. His Royal Highness sent a gracious message by an old friend of the dying apostle, Sir Bartle Frere, as well as the royal portrait.

It might have been thought that so uncompromising a missionary would have had few friends among the natives generally. Such was not the case. Very close ties bound the missionary to high Hindoo and Parsee families. Government official says, "He knew four generations of our family. He loved me and my brother Venkut Rao most tenderly." A Parsee gentleman said, "Dr. Wilson did not make me a Christian, but I hope I am a better man for having known him than I would otherwise have been." "The native princes, Mohammedan and Hindoo, rarely visited the capital without seeking an interview with one who had been a welcome preacher in their durbars; and on such occasions of rejoicing as marriages, they sent him khureetas, or letters of honour, illuminated with the perfect taste of the Oriental, and delicately besprinkled with gold dust." But in the inmost shrine of the missionary's affections were his own students and the native Church. To these he was more than father, and they to him were more than children. His Church was "gathered out of

every kindred, and tribe, and tongue; barbarian, Scythian, bond and free, from all the lands around the Indian Oceau. On the thirtieth anniversary of his landing at Bombay, the whole adult community, of more than two hundred souls, presented him with a loving address, and a copy of the Hexapla, as best typifying his work and the tie which bound them to him and to each other." A native Christian of low caste once said in a touching tone, "Dr. Wilson believes me; the Padre Sahib knows I say true." Let it not be said that Hindoos are strangers to affection and gratitude.

When the last hour came, "at his feet gathered more. and more to him, than prince or viceroy, governor or The Hindoos were there: Tirmal Rao and his two sons came from far Dharwar to seek his blessing. knelt before him, their turbans on the ground, as they laid the Christian patriarch's hands on their heads; and when he died they—Hindoos—begged his body that they might bury it. The Mohammedans were there. A family greatly attached to him brought their own physician to see him, pleading that a hakeem who had healed the Shah of Persia must do him good. The Parsees were represented by Dhunjeebhoy and Shapoorjee, his first and his latest sons in the faith from their tribe. In the wanderings of unconsciousness, the words of Scripture, clearly read, often recalled his soul to follow them. At five in the evening of the 1st December, 1875, peacefully, John Wilson entered In ten days he would have completed his into rest. seventy-first year. How all Bombay, how half India, made great lamentation for John Wilson, and carried him to his burial, the journals of the day record. Governor. Council, and judges; University Vice-Chancellor, General, and Sir Jamsetjee Jeejeebhoy; missionaries, chaplains, and Portuguese Catholics, the converts, students, and school-children: Asiatics and Africans of every caste and creed, reverently followed all that was mortal of the venerated missionary for two hours as the bier was borne from 'The Cliff' along Malabar Hill, and down the road which sweeps round the head of the Back Bay to the Free Church on the Esplanade, and then to the last resting-place."

Dr. Smith laments that no worthy life of Carey has ever been written. So do we, and add, who so competent for the task as the biographer of Duff and Wilson? It would be worth while sacrificing temporary work for such a

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ART. VI.—The Relations of Mind and Brain. By HENRY CALDERWOOD, LL.D., Professor of Moral Philosophy, University of Edinburgh. London: Macmillan and Co. 1879.

We gladly welcome this admirable contribution to psychological science. Its philosophic tone, and the truly scientific caution displayed in the discussion of subjects so strongly provocative of theory or dogma, are worthy of its distinguished author. Dr. Calderwood appeals to facts, and in the name of the latest biological research proclaims the duality of man. In opposition to the opinions of those who would reduce thought to mere cerebral action and treat the problems of mind as purely kinematical, valid arguments are adduced to show that no mechanical theory will satisfactorily explain the simplest and most characteristic phenomena of mental life. Although the work is professedly occupied with "The Relations of Mind and Brain," its object being to "ascertain what theory of mental life is warranted on strictly scientific evidence." we value it chiefly as a defence of dualism. Nor is such a defence ill-timed. Through the concomitant advance of allied branches of knowledge and the introduction of new methods of research, the science of Physiology has of late years emerged from chaos into the precincts of the exact sciences. And in no department has this advance been more marked than in the physiology of the nervous system. As a result of the pathological investigations of observers too numerous to mention, and the embryological researches of Flecheig and Pierret, the various regions of the spinal cord have been mapped out, and exact functions assigned to some of them, with a precision which the most enthusiastic neurologist a few years ago would have considered utopian. Nor is science now debarred from examining the arcana of the brain itself. The experiments of Fritz. Hitzig, Ferrier, and Munk on the cerebral cortex have aided and stimulated pathological observation to such a degree, that already the doctrine of the localisation of the cerebral functions in man rests on a firm basis. It is not therefore surprising, that the psychologist should now seek to ascertain how the well-known phenomena of mental life

are to be interpreted in the light of the recent remarkable conquests of physiology. The limits of this article forbid the presentation of all Dr. Calderwood's arguments, even in bare outline, since each depends on anatomical and physiological facts, the mere enumeration of which fills half his volume. An exhaustive treatment of the subject, therefore, being out of the question, we shall endeavour to lay before our readers, in as clear and popular a manner as possible, a few only of the more interesting facts and simpler inferences.

The nerve tissues of the human body, whether considered from a physiological or anatomical standpoint, are fundamentally two-fibrous and cellular. The former, consisting of fine threads of protoplasm guarded by delicate sheaths, serves as the conductor of nerve currents. Along its fibres impressions made on the general surface of the body, or those parts specially modified for the reception of waves of light, sound, &c., are conveyed to the central organs, the spinal cord and brain. Numberless other unfelt messages are sent in the same direction from the various tissues and organs, whereby their wants are made known to mechanisms instinct with wisdom. Fibres performing such functions are termed afferent. termed efferent, convey outwards the orders given by the central nerve cells. Along these are conducted the stimuli which rouse the various voluntary and involuntary muscular fibres to action, inhibit their contractions, or influence the nutritive processes or functional acts of the other organs and tissues.

In addition to the white fibres we find nerve cells, collected together in the grey matter of the spinal cord and brain. Anatomically they consist of minute irregular masses of protoplasm, varying much in diameter, containing a nucleus, and usually sending forth fine and thicker arms, some of which may become directly continuous with the central part, or axis cylinder, of a nerve fibre. Functionally the cell differs from the fibre in being not only a conductor but also a storehouse of energy. It does not merely reflect the afferent current but responds to the stimulation by the generation of a fresh and often much larger amount of energy which is duly discharged along the proper efferent fibres. Thus the gentle excitation of a few sensory fibres in the sole of the foot will, in the absence of inhibitory influence from above, so affect the motor cells

of the spinal cord as to produce marked muscular contraction throughout the whole limb and the adjoining part of the trunk. The energy sent out by the nerve cells to the numerous muscles far exceeds that conveyed to the cord from the sole of the foot. The action in such cases is often, and not unaptly, likened to the firing of a gun. The fall of the hammer, involving the expenditure of but little energy, determines the explosion of the powder, whereby a large amount of latent energy is rendered kinetic. So the nerve current travelling from the sole of the foot pulls a trigger in the cord, as the efferent stimulus sent out by the cells pulls a trigger in the muscles. The nerve cells therefore contain stores of dormant energy subject to influence through nerve fibres. Actions such as the above, where the character of the movement is determined by influence from without, are termed reflex, and may take place when both will and consciousness are in abevance. Many actions primarily voluntary become by constant repetition practically reflex. This is well exemplified in the power of walking. Though gradually acquired at the expense of many falls the nerve course becomes at length definitely engraved in the system. Almost every adult has experienced the surprise aroused when, after deep converse with himself, he wakes to find his body has carried him far away from the spot where reverie commenced. All walking indeed, is chiefly reflex, and the act is much less fatiguing when thus accomplished than when sustained by conscious voluntary impulse. Nor is this confined to movements involving but little primary intellectual exercise. only will experienced musicians continue playing familiar though intricate pieces without consciously guiding their actions, but we have it on the best authority that a distinguished minister, whose life is before the public, once, when thoroughly tired, slept, or at any rate lost consciousness, during the delivery of a sermon. Awaking to a sense of his position, he was naturally discomposed at his entire ignorance of what the congregation had been listening to. Happily his well-disciplined brain continued the thread of the discourse, so that he was once more able to assume conscious command of his movements and proceed with his accustomed elequence. Secondary reflex mechanisms. easily and deeply engraved when the system is plastic. form the legacy of youth to manhood, and may unfortunately be written by vice as well as by virtue. It must

not be supposed that there is any definite physical property by which cells concerned in the production of sensation can be distinguished from those presiding over motor The cells connected with afferent, or so-called sensory, fibres are certainly smaller than motor cells, but this difference obtains quite as markedly in the spinal cord, where no sensation is produced, as in the brain. Probably in reflex action the afferent impulse is received by a "sensory cell," passed on to the appropriate motor cells, and thence forwarded along their efferent fibres to the muscles. Direct evidence of the necessity of this double transmission is, however, wanting. An interesting problem now presents itself. Can the central cells send out nerve energy from physico-chemical processes occurring in their interior, apart from stimulation through an afferent fibre. This is still a most point among physiologists. Some consider all acts to be essentially reflex. and excluding such as are mental, this is apparently the position adopted by Dr. Calderwood. At the same time it is ably argued by Dr. M. Foster, in his justly renowned work on physiology, that the nerve cells of some centres concerned in the continuance of organic life, e.g., the medullary centre for respiration, act automatically according to a definite law of variation. In other words, apart from external stimulus, the centre sends out nerve currents which produce muscular contractions suited for a definite end. However this may be, and we incline to Dr. Foster's view, no law of variation inherent in the cells of the brain will account for the acts usually termed voluntary. grand question which forces itself upon us at last is, Are the highest nerve centres, forming the grey matter of the cerebral cortex, entirely at the mercy of impulses from without and of physico-chemical changes taking place within; or are such cells under the control of an extra-physical substance or power termed mind? What determines the explosions taking place in the cortex of my brain when, in fulfilment of a definite purpose, I move my hand to pen these words? The dualist will reply, Mind, the monist Molecular, mechanical force. We have undoubtedly arrived at a mystery, but one which has been recently much misrepresented.

Nor have we far to go to find the cause. Unduly influenced by one aspect of the law of the conservation of energy, the correlation of so-called physical forces, philosophers have attempted to show that if mind exists, there must necessarily be in the production of sensation some transmutation of kinetic energy into feeling, and in volition some retransformation into a mechanical impulse. On reflection, this has appeared impossible, and they have in consequence rejected dualism for an apparently more consistent monistic theory. Professor Tyndall declares with good reason the gulf between mind and body to be impassable; that is to say, we can imagine no actual transmutation from one realm to the other. They react without interchange, a phenomenon not altogether without its counterpart in some other mysteries of Nature. The transformations of kinetic energy, however, form but one part of the grand dynamic theorem. We have to consider not only the change from one form of kinetic energy to another, as from visible or molar motion to the invisible molecular motion of heat. but from what has been called potential energy to kinetic. The key to the action of mind on body is not to be sought in the former, but in the latter. Though the idea of transmutation is usually associated with both processes, in reality it belongs to the former alone. As Professor Birks urges in his Modern Physical Fatalism, the change from the potential to the kinetic involves something higher than mere transformation; it apparently entails causation, production. We have no reason for supposing potential to be in some sense hidden kinetic energy. The simplest theory postulates for gravitation a force inherent in matter which produces what, measured in one way, we term motion, in another, kinetic energy. As the subject has already been discussed in this REVIEW, we refrain from all detail. There is no reason to suppose that the force changes, though limited by law in its exercise. Force does not become motion, it produces motion; the cause is independent of the effect, and unaltered by acting. The so-called transformation of kinetic into potential energy is thus not to be regarded as a transmutation of kinetic energy into force. at the replacement of a certain amount of kinetic energy by a corresponding increase in the possible exertion of force due to altered distance. Thus Nature in her earlier mysteries foreshadows the difficulties which arise in connection with mind and brain. Rising higher in the scale, we find that the power termed life is said to have no physical correlative. It influences, it makes use of mechanical forces, but it is quite distinct from them, and is not changed

into them. In the words of Professor Tait, quoted by Dr. Calderwood, "It seems from the observations of physiologists as to the formation of cellular matter, and the production in living organisms of compounds which have not yet been made by ordinary chemical processes, that the vital force, if there be such (let us say, 'nerve force'), is not a force which does work, but merely directs, as it were, the other natural forces how to apply their energies. . . . When gangs of labourers and masons are at work building an edifice, the former are employed raising stones, mortar, &c., the latter in laying them; but there is present an overseer with a plan, who, doing no (mechanical) work himself, guides and directs the proper expenditure of force by the working body. In this view of the case, the labourers are the physical forces, and the overseer the vital force."

As life rises in mastery over mechanical forces, so mind, with its powers, dominates over both. We need, therefore, no assumption of transmission, or theory of interchange, to explain the action of mind on body. Mysterious it will always be, but not without its analogies in the lower

walks of Nature.

The phenomena of mind have been studied from the earliest times, whilst the functions of the organ of mind have only recently been investigated with any approach to accuracy. The prior development of psychology is not surprising. The operations of mind are facts of self-consciousness. That I perceive a particular sensation, that I discriminate it from other present and past sensations, that I determine and accomplish some action for a definite purpose, are daily experiences of my life. The data of psychology are ever before us. Though alive to sensation, conscious of intentions, and capable of carrying them out, the mind is altogether unconscious of the means employed. The marvellously delicate mechanisms through which its determinations are executed, are entirely objects of indirect study. Woman-like, it sees the end from the beginning without discerning the means. Thus widely separated by the methods of their acquisition, the facts of mind and brain form two distinct branches of knowledge. The physiologist will never discover mind in his investigation of brain, nor will the psychologist discover brain in his investigation Though we may venture, by collation of of mind. the two series of phenomena, to indicate their possible relationship as player to instrument, yet it must ever be remembered that no mystery in that relationship at all weakens the fundamental facts of each. Were it on the other hand proved that the brain, as an instrument, is a perfect reflex of mind, we should not on that account have

any logical right to confound it with the player.

Dr. Calderwood, after successively reviewing the phenomena of brain and mind, endeavours to show that the former will not explain the latter, and that the brain, as an instrument, is not coextensive with the powers behind it. Though we perfectly agree with him in upholding the duality of man, we cannot adopt all the views which he propounds, or at times shadows forth with respect to the relationship of brain and mind. The physiology of the brain must be much more definitely and extensively elaborated before it can be scientifically affirmed that certain mental operations are accompanied by no corresponding cerebral changes, have in the brain no physical instrument. A blow on the head may turn an honest man into an incorrigible thief-not that the man is responsible; and a dose of opium or Indian hemp will bring before the inner man, quite independent of voluntary mental action, the most gorgeous visions, collocating sensations, hitherto never collocated even by the imagination, in the most artistic manner. Many other illustrations might be instanced, in which a purely physical antecedent produces most marked results in the realm of mind. We do not for one moment question the perfect distinctness of the operations of mind and brain. Their difference in kind is illustrated throughout the whole development of Dr. Calderwood's argument. All we suggest is that physiology may yet demand physical changes as concomitant with at least some of the higher intellectual processes.

The ultimate termination of the most important nerve fibres, viz., those concerned in the origination of sensation and voluntary motion, is to be found in the cells of the grey matter covering the outer surface of the large brain, which layer is termed the cerebral cortex. At the present time this is the battlefield of both physiologists and pathologists. In Chapters IV., V., Dr. Calderwood gives an interesting epitome of the results of the viviscetions of Fritsch, Hitsig, and Ferrier, together with the comparative anatomy and physiology of the brain in some of the higher animals. We must confine ourselves to the former. The question proposed by Dr. Ferrier was, "Whether the cerebrum, as a whole, and in each and every part, contains within

itself, in some mysterious manner inexplicable by experimental research, the possibilities of every variety of mental activity, or whether certain parts of the brain have determined functions." His own experiments strongly supported the latter view, and there can now be no doubt but that in the cerebral cortex we have the internal keyboard of the nervous system. The electric stimulation of certain portions of the exposed surface of the brain of an animal, rendered insensible by chloroform, produces definite movements. The results do not follow indiscriminately, but the excitation of the same spot always gives rise to the same movement. Thus in one series of experiments on the dog. the application of the electrodes to a certain part of the cortex produced barking. "To exclude the possibility of mere coincidence. I then stimulated in succession various parts of the exposed hemisphere, producing the characteristic reaction of each centre, but no barking. The reapplication of the electrodes to the mouth centre elicited the barking, and did so invariably several times in succession." Moreover, with some slight variations, the brains of all the higher animals are found to be constructed according to the same plan. Parts, the stimulation of which produce one form of movement in one animal, display the same function in all animals whose physical construction and habits allow of the movement. Thus, whilst both dog and monkey rejoice in the possession of a "tail centre." in the former alone can the centres for "individual and combined movements of the fingers and wrists, ending in clenching of the fist," be isolated. In a word, the motor life of each animal was found written in plain characters on the surface of its brain. What physiological experiment has proved for animals, pathology has abundantly confirmed, both as regards position and function, in the case of man. The connection of these cerebral centres with the motor nerves through the spinal cord is distinctly taught, and the exact path taken by the fibres demonstrated, by the descending solerosis which follows their destruction.

Far from monopolising the whole of the cortex, the motor centres are limited to the anterior and upper divisions of the central part of it. The cells of the cerebral cortex lying behind the motor area are almost as certainly proved to be centres for the termination of the sensory nerves. The following extract illustrates the methods employed by

Dr. Ferrier in his attempt to determine the centre for vision. Electric stimulation of a certain exposed portion of the cortex of a monkey's brain produced—

"' Movements of the eyeballs, frequently associated with movements of the head to the opposite side, and very often contraction of the pupils.' Destruction of the region indicated (angular gyrus) caused 'blindness in the opposite eye.' But here appears one of the features in such cases which calls for special consideration, as bearing on the relation of the hemispheres. The destruction of this part of the brain, hypothetically the centre of vision, is effected only on one side, that is, the left hemisphere; and in consequence the right eye becomes blind. But the loss of sight in that eye is not permanent if the analogous portion of the brain on the right hemisphere remains uninjured, 'compensation rapidly taking place, so that vision is again possible with either as before.' In order to test the result the left eye, as the one likely to be unaffected, was bandaged; the right eye was exposed. The animal 'did not flinch when held close to the gaslight;' and did not recognise its companions in the cage. About an hour afterwards the animal was taken out of the cage again, the bandage removed from the left eve, and the animal set down on the floor. immediately looked round, and ran nimbly to the cage, and joined its companions.' 'Next day, however, on the left eye being again bandaged, the animal gave evidence of sight by running up to its cage, the door of which was shut, and lapping water from a dish, which it reached by inserting its hand between the bars.' A single day seems to have been sufficient, if, indeed, this may be regarded as the method of recovery, to establish a relation between the right eye and the right hemisphere, such as to secure anew the efficiency of the injured eve.

"In another case the same portions were destroyed on both hemispheres, and the result was total blindness of both eyes. In such a case Dr. Ferrier says: 'The loss of vision is complete and permanent, so long, at least, as it is possible to maintain the animal under observation.'

"A piece of apple dropped so as to come in contact with the hand was picked up and eaten. A cup of tea was placed to the animal's lips, when it at once began to drink; but when taken from its lips, 'the animal was unable to find the cup, though its eyes were looking straight towards it.' After this test had been repeated several times, the cup was again placed to its lips, when 'it plunged in its head, and continued to drink though the cup was gradually lowered and drawn half-way across the room.' On this evidence, the conclusion seems warranted that the centres marked 18 and 18' (angular gyrus) indicate the centre of vision."—Pages 109—111.

The centres of hearing, taste, and smell were mapped out by a similar procedure. Though the evidence in favour of the localisation of the visual centre obtained by Dr. Ferrier seems decisive, later German and Italian researches have rendered his conclusions more than doubtful. observers agree that certain areas of the brain surface, notably the frontal and the posterior or occipital lobes, give no appreciable motor response when stimulated. As the latter is supplied mainly by sensory nerves, many surmised it might prove to be a collection of purely sensory centres. This supposition is fully confirmed by the recent elaborate and extended experiments of Munk, who has demonstrated a purely sensory centre of vision occupying most of the occipital cortex. Unilateral destruction of this centre entailed in monkeys not total loss of sight in the opposite eye, but hemiopia, which is in perfect concordance with the course taken by the optic fibres in the commissure. Lesions similarly localised, and producing like results in the human subject, have since been reported by Curschman and Poulley. Nothnagel, in his recent work on The Topical Diagnosis of Brain-Disease, gives evidence to the same effect. In all these cases there were no motor symptoms to indicate a "mixed" centre. Already Munk's researches have been confirmed by Italian observers, and before long, no doubt, the apparent discrepancy with Dr. Ferrier's results will be satisfactorily explained. Whether, as some assert, Dr. Ferrier's visual centre is really the centre of "common sensation" for the eye, must be left for future experiment to decide. At any rate, there is nothing in the disagreement of the results to negative the probable existence of pure sensory centres. The arrangement of the sensory fibres at the base of the brain is as definite as that of the motor fibres. As proved by Charcot and Nothnagel, the destruction of the posterior part of the internal capsule, which includes the fibres passing up to the occipital cortex, produces complete hemiansethesia, including loss of sensation through the special senses. This again seems to lend support to the theory.

The manifold difficulties lying in the way of pathological research on sensory localisation in the human brain will necessitate prolonged observation. As most impressions received through the higher senses are double, and duplicate lesions of corresponding parts in the cerebral cortex are very rare, it is not surprising that so little available

material exists. Moreover, the exact estimation of sensory changes is a far more difficult problem than the determination of the site and extent of loss of motor power. Only in the case of highly specialised sensations have definite results been recorded, some of which will be noted hereafter.

The premotor area, though receiving a large number of efferent nerves, is conspicuously silent under stimulation:

"Dr. Ferrier's observations on monkeys from which the frontal lobes had been removed involve these points, that the animals retained their appetites and instincts," their sensory faculties remained unimpaired, and their 'powers of voluntary motion.' 'Though they might seem to one who had not compared their present with their past fairly up to the average of monkey intelligence. 'instead of, as before, being actively interested in their surroundings and curiously prying into all that came within the field of their observation, they remained apathetic or dull, or dozed off to sleep, responding only to the sensations or impressions of the moment, or varying their listlessness with restless and purposeless wanderings to and fro.' Their deficiency seemed to be a loss of concentrated observation. That the function of the cells in the frontal lobe differs essentially from the function assigned to the cells in the other lobes, there is no evidence to prove. The possibility of some difference may be left an open question, but this is the utmost that can be granted. If power of intelligence be lodged somewhere, there is nothing, either in the outer formation of the brain or in its internal structure, to indicate a distinct centre for such a power. The utmost that can be said is, that a measure of concentrating power for the organ as a whole, and thereby for the nerve system in all its ramifications, belongs to the frontal lobe. As the cerebellum is the centre which provides for equilibrium in locomotion, and the cerebrum as a whole is the governing centre for the entire nerve system, so is the frontal region of the cerebrum the governing centre for the organ itself. In some way, not at all explained, the general centre of control seems to belong to the frontal region. That in human life mental phenomena, including the ordinary forms of intellectual action, are connected with the central government of the nerve system, is admitted as beyond dispute; but that these phenomena are the product of brain activity, there is no scientific evidence to show. . . . I have endeavoured to present in detail the evidence as to structure and function of brain and nerve, but there does not seem to be any portion of that evidence pointing to the conclusion that to the sensory and motor functions there fall to be added intellectual functions."—Pages 209, 210.

There are, however, in the case of man, some very

suggestive symptoms exhibited in connection with the premotor sphere, which cannot be altogether ignored. It is a curious fact that in cases of unilateral epilepsy, with definite surface-lesion, the series of events forming the attack varies in the following manner. If the disease be situate behind the motor area, the fit is preceded by a sensory aura. This is followed by motor disturbance, and if the attack be severe, loss of consciousness supervenes. When over the motor area, definite convulsive movements form the first symptom of the seizure, which may or may not, according to its severity, he followed by loss of consciousness. But where the præmotor area, or frontal region, is primarily affected, loss of consciousness is invariably the first symptom, sometimes lasts for a considerable time, and, if the attack be severe, may end in profound sleep or marked mental confusion. So reliable are these symptoms, that we could relate several instances in which the exact localisation of the lesion was predicted during life, and accurately demonstrated in presence of doubting bystanders after death. In two cases of cerebral tumour occupying the frontal lesion, for the accuracy of which we hold ourselves responsible, similar symptoms were displayed. The first, a gummatous growth, produced before death prolonged unconsciousness without motor disturbance, and great hebetude during the previous days. The second, an abscess, caused marked apathy; the patient could walk and feel, but only talked when spoken to, displayed decided decrease of intellectual power, and performed the most senseless actions, e.g., getting out of bed to turn his coat inside out. Such cases might easily be multiplied. view of these and some others we shall refer to hereafter. the possible localisation of a centre for consciousness must be admitted. Minor changes in character and intellectual power are not easily detected; the experienced physician often finds great difficulty in establishing the insanity even of those who require detention. As Dr. Ferrier observes. "Marked mental deficiency has been frequently noted in connection with arrested development, or atrophy, of the frontal lobes, without any objective symptoms as regards mobility or sensibility." "Indeed, the frequent association of idiocy with such defect of the frontal lobes is a generally recognised fact." Facts like these demand at

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least suspension of judgment as to the functions of the præmotor area. To us the mystery of mind and body does not lie so much in the extent of the connection as in the fact itself. Once grant the production of sensation by molecular change occurring in a nerve cell, and all à priori reasoning as to the impossibility of the exercise of the higher powers of mind in conjunction with a physical instrument is excluded.

Following the order adopted by Dr. Calderwood, let us now briefly review the relation of the sensory apparatus to sensation. Nerve fibres travel from the surface of the body, where special terminal organs, susceptible to external impressions, are provided, and pass through certain centres in the spinal cord and brain up to the cerebral cortex. The areas occupied by the cells in which the fibres from the different sensory organs terminate, have been more or less accurately mapped out. Apart from an appeal to personal consciousness, the physiologist finds in this sensory system none but purely physical processes. He resolves the stimuli from without, light, sound, heat, &c., into molar or molecular motion. In like manner the nerve current passing to the cord is explained by "movement of mole-cules," or "transfer of energy." The changes in the receptive cells of the cord or medulla may either cause transfer of energy through motor cells to the muscles, or influence the upward fibres, so that eventually a change is produced in the ganglia cells of the corresponding centre on the surface of the brain. We have no exact information as to what takes place in these cells, but it is admitted that there must be some change in the motion of the molecules, with or without the generation of fresh energy. No distinction, moreover, can be drawn between the changes occurring in the cells of the cord and the cells of the cerebral Nothing is discovered but purely physical pheno-Sensation can no more be attributed to the central than the peripheral organs. But personal consciousness. the source of the facts of psychology, insists that somewhere and somehow "sensations" are produced, and by combining both methods of inquiry, the seat of their production has been approximately determined. Though we talk of feeling with the fingers and seeing with the eyes, numerous experiments prove that no sensation occurs unless the stimulus from without reaches the cerebral cortex. If a sensory nerve or the spinal cord be severed,

no stimulus applied to the corresponding peripheric area, however intense, will arouse sensation. There is, moreover, a certain spot in the brain where all the sensory fibres are massed together before separating to pass to their various centres in the cortex. If this be divided on both sides, total anæsthesia results; no irritation of the surface or of the organs of special sense produces any effect on the consciousness of the individual. Hence we are led to locate the origin of sensation in the cells of the "sensory" cortical centres. But these cells exhibit no powers to account for this result; they and their internal changes are as purely physical as those of the cord. Hence for the very first and lowest phenomenon of mind we are driven beyond the brain. There is a physical antecedent, but no one can trace the psychological consequent.

In connection with this subject Dr. Calderwood makes some statements to which we can hardly assent—perhaps we misunderstand his meaning. He says:

"There is not the intense sensitiveness in the grey matter of the brain which might have been expected in view of the fact that it is the great centre of sensory impressions. Great sensibility to impression there is at the periphery; whenever that sensibility is affected there is immediately transmission of a message to the brain, but facts do not warrant the supposition that the message is delivered at the central organ by a simple repetition of what has occurred at the extremity of the nerve line. The seat of sensibility is recognised by us as the finger, toe, or arm, as the case may be, but this is not the result of sensibility at the centre being correlated with sensibility at the finger, toe, or arm. . . . Facts are against the supposition that the message is delivered by acting upon a sensitive surface in the grey matter. There is action upon the nerve cells and consequent molecular change, but there is not sensibility in the grey matter as there is in the white or fibrous. This conclusion as to non-sensibility is favoured by the similarity of the cells in the grey matter, in harmony with the depth of the layer in which they are found."—Pages 51, 52.

We entirely fail to appreciate the distinction here drawn between the sensibility of the end-organs and the insensibility of the sensuous part of the cerebral cortex. Either the terms sensitive and sensible are used synonymously, or the cerebral cortex is affirmed to be neither sensitive nor sensible. We scarcely know which alternative to adopt. If there be some reference to sensation, as is apparently implied in the words "the seat of sensibility is recognised

by us as the finger." &c., then we must observe that what is true of one sense is not true of all. We do not refer, nor we never have consciously referred, the objects seen by the eyes to the receptive retinal surface, nor do we refer external sounds to the auditory end-organs. In the case of the sense referred to by Dr. Calderwood the object presents itself directly to the skin, and is perceived where it exists, as in the other cases. Consciousness reveals neither the end-organs, fibres, nor central cells, and all that Physics detects is molecular or molar motion. nerve cell is as sensitive to the influence of molecular motion of the nerve current as the end-organ to the mechanical stimulus from without. We can see no propriety in the terms unless they are intended to signify "responsive to stimulus." If so, we hold that the cerebral cortex is not insensitive, and may be brought into action apart from any influence through the fibres below. The stimulus by which sensory cells are normally rendered active is delicate molecular movement: therefore in testing the sensitiveness of the cortex its natural stimulus should be imitated. Now delicate electric currents applied to the cells in some sensory areas produce movements strongly suggesting sensation: thus in stimulating the olfactory centre, twisting of the lip and nostril took place so "as to cause a partial closure of the nostril, as when a pungent odour is applied." Who is to say that no sensation would have accompanied this movement had the animal been conscious? Unfortunately, as the appeal is to self-consciousness, animals are almost useless for experiment, and no such direct test is possible in the case of man. Nevertheless, many cases might be instanced where a localised lesion, causing thickening and adherence of the membranes of the brain over a definite small cortical area, has produced epileptic attacks preceded by a fixed sensory aura. We have therefore no valid reason for denying sensibility to the cerebral cortex. The fact that "protruding parts of the brain have been cut away without any sense of pain, and without the appearance of the loss having caused any disturbance to mental action " (page 51), is a general statement which bears little on the question. The American crowbar case here quoted is quite out of place, as Dr. Calderwood himself afterwards shows that the man's character underwent marked change; his companions significantly affirmed that he was "no longer Gage." From a "shrewd, smart

business man, very energetic and persistent in executing all his plans of operation," he became "fitful, irreverent, . . . at times pertinaciously obstinate, yet capricious and vacillating, a child in intellectual capacity and manifestations, with the animal passions of a strong man" (397). In this case the præmotor area was affected. In passing judgment on such cases it must be remembered not only that the brain is a duplicate organ, but that the functions of its various parts differ. Therefore that which belongs to a portion only must not be attributed to the whole. Whether, as Dr. Calderwood suggests, pain be due to a "convulsive," and tactile sensations to a "quiet rhythmic movement" of the same fibres, is doubtful. any rate the sense of pain is quite distinct from that of touch, as the latter may exist in perfection without a trace of the former: a condition of things sometimes seen in Progressive Muscular Atrophy. We have at present two cases under observation where the senses for temperature and pain are completely annihilated in both arms, though the senses for weight and touch are both intact. Quite possibly therefore those tracts which are separate as low down as the spinal cord have separate terminal areas in the cortex. Hence the absence of pain in cortical lesions is an argument in favour of definite localisation rather than of general insensibility of the grey matter.

But to return. In the case of the sense of touch-

"What Physiology has done is to account for tactile impression,—a sensibility belonging to man's organism. What Physiology does not accomplish is to account for that knowledge of himself existing in a particular state, which is for an intelligent being the most simple and ordinary experience accompanying tactile impression. Psychology begins with this, as the simplest and the primary fact, the knowledge of self as experiencing a particular sensation."—Page 218.

Proceeding one step further, we find self discriminating between present and past sensations.

"The sensory apparatus provides for diversity of result, but not for comparison of differences. The law of nerve action implies the contrary, the cessation of one action as the condition of another. Even if physiological hypothesis were ventured in the form of a suggestion that there may be in the sensory cell a register of the shock delivered there, this would not help us towards an explanation of the facts of consciousness. Even if

there were such a register, and the registration were made on a sensitive surface and were permanent, this would not meet the requirements of the case. A register contains the materials for comparison, but does not institute comparisons. The facts carry us quite beyond mechanical contrivance, inasmuch as one thing not only follows another, but one thing is compared with another; that is, there is not only one thing distinct from another, but one thing is distinguished from another."—Page 219.

Though the power of discrimination, dealing with sensations, themselves mental phenomena, is acknowledged to be a faculty of mind, it is by no means easy to determine the extent and character of the physical mechanism employed. We shall not be surprised if time proves that the brain presents a much more faithful reflex of mind than Dr. Calderwood seems to believe. With Dr. M. Foster it may be said that all physiology, intricate as it is even in the lower branches, is mere skirmishing till we come to the nervous system, and of the nervous system the brain is the pièce de resistance. We shall now attempt to illustrate and apply some of its functions which bear most directly on the sensory system.

How the brain can keep a register of the antecedents of past sensations is indeed difficult to understand. Nevertheless disease is constantly presenting us with cases in which purely physical changes affecting the cerebral cortex reproduce sensations felt in the long past. At times these antecedents of sensations are regrouped in hitherto unknown and often fantastic combinations. Though there be now no corresponding stimulus to the peripheric nerves the central physical processes may reasonably be assumed to be similar to those which occurred on the former presentation of the same sensations. This localisation of the antecedents of sensation is possibly as definite as in the case of motor phenomena, but is necessarily much harder to demonstrate. In cases of epilepsy, where a definite lesion occurs over the sensory area of the cortex, a constant sensory aura precedes and gives warning of the fit: the patient perceives a peculiar odour, hears a certain sound, experiences some visual disturbance, falls into a fixed train of thought, or is the subject of an ill-defined organic sensation. That the topographical peculiarities of all human brains are inherently the same is suggested by the symptoms observed in hystero-epilepsy, where a disturbance traverses the cortex from before backwards. After

the stages of unconsciousness and tonic and clonic spasms, so graphically described by Charcot, there comes a period of sensory disturbance accompanied by the most curious hallucinations. These almost invariably occur in the same order in all patients. Amongst the most frequent and constant may be mentioned the sight of heaven and the angels, and the appearance of numberless small animals, usually rats or mice, running round in one special direction. Nerve storms thus playing on the keyboard of the brain reveal strange functions! As cerebral localisation may be very profitably studied in connection with the pathology of the brain centres involved in the use of language we append some illustrations culled from Kussmaul's elaborate thesis. For convenience the language of gesture is excluded, as space forbids an extended discussion. Persons in full possession of their senses have two inlets for words—the eye and the ear—and two outlets the motor apparatus employed in speech and writing. Pathology reveals the existence of four corresponding centres, each highly specialised, which have evidently definite connecting tracts. Kussmaul argues that the facts also demand an additional centre for ideation. Though usually grouped under one name, aphasia. disturbances of speech are in reality very various. In one variety there is, apparently, severance of the connecting link between the auditory receptive centre and the thought centre, without destruction of either. "The association between (spoken) word and idea is interrupted." If the severance be complete the patient cannot utter a single word spontaneously. "The idea of an object, or of its properties and relations, rises up in the mind but the accompanying word-image is wanting, or only partially enters the recollection." Such a man will repeat at once any number of words which are spoken to him, showing that the auditory receptive word-centre and the way out for speech is perfect. He will also write from dictation. Moreover, as in a case published by Dr. Hertz,* the optic centre for words may have all its connections complete in spite of the affection of the auditory centre. "When a book or manuscript was put in his hand he read easily and distinctly, and not even the smallest mistake could be noticed. As soon as he laid aside the book he was unable to repeat

Kummaul.

a single one of the words just read." This form of derangement may be curiously partial, showing how minutely specialised is the localisation which exists in the brain. Thus a hind, from injury to the head, lost the use of nouns but retained command over the verbs. The idea being present he attempted to paraphrase it, e.g. "a pair of scissors he called that with which one cuts; the window, that through which one sees—through which the room is illumined," &c. "The following remarkable case is uncommonly interesting, since it shows that only the initial letters of the substantive, and consequently only a portion of the word, may be aroused in the memory by the idea, the rest of the word not emerging until the corresponding written word meets the eye.

"A man fifty-six years of age, after an apoplectic attack, lost his memory for proper names and substantives in general, with the exception of their first letters, although the power of speech was not impaired in other respects. He prepared for himself an alphabetically arranged dictionary of the substantives required in his home intercourse, and whenever it became necessary for him to use a noun he immediately looked it out in his dictionary. When he wished, e.g., to say Kuh (cow), he looked under K. As long as he kept his eye upon the written name, he could pronounce it, but a moment afterwards he was unable to do so." In the case of a boy observed by Schlesinger all the initial consonants of words were left out both in speaking and writing. In a case now under our observation a man will name anything shown to him, e.g., pen, inkstand, &c., and will repeat the words when uttered; but

put the object out of sight, and he cannot recall its name.

Thus a brain lesion may produce complete or partial loss of memory, and therefore of the voluntary use of spoken words, though the receptive auditory centres be intact. And so for the memory and use of spoken words—ideation apart from the use of such words may be perfect—the mind is shown to be dependent on the integrity of a certain as not yet precisely defined tract in the brain. The auditory receptive centre for words may however be itself affected, as also that for word-images used in reading and writing, though the senses of sight and hearing remain in all other respects perfect. In such cases it is sometimes found that—

"The understanding for words can be lost, and that for sounds or letters retained. The perception of sounds and murmurs which

ere individually known as vowels and consonants, and their arrangement into the acoustic word-image which becomes the symbol of this or that idea are different functions, which are performed in different parts of the central system. The aphaeia of Lordat, of which we have already repeatedly spoken, is one of the most interesting examples of entire inability to speak due to loss of the memory for words with complete word-deafness and word-blindness. We will linger a little longer over his case.

" Je me trouvai privé de la valeur de tous les mots. S'il m'en restait quelques uns, ils me devenaient presque inutiles, parceque je ne me souvenais plus de la manière dont il fallait les coordonner pour qu'ils exprimassent ma pensée.' This statement, it is true, leaves it uncertain whether Lordat was entirely deprived of the word-images; but it is altogether probable that he was, since he not only could not utter a single word, but distinctly states that the words fell uncomprehended upon his ear, although his hearing was preserved and he was able to reflect as a physician and philosopher upon his condition. In the same way the treasures of writing were closed to him as with seven seals, He could spell, it is true, but he could not read. 'En perdant le souvenir de la signification des mots entendus, j'avais perdu celui de leurs signes visibles. La syntaxe avait disparu avec les mots, l'alphabet seul m'était resté ; mais la jonction des lettres pour la formation des mots était une étude à faire. Lorsque je voulus jeter un coup d'œil sur le livre que je lisais, quand ma maladie m'avait atteint, je me vis dans l'impossibilité d'en lire le titre. Il m'a fallu épeler lentement la plupart des mots.' He describes with deep emotion the happy moment when, after several wretched weeks, he allowed his gaze to wander over his library, and unexpectedly from out of a corner the words Hippocratis opera flashed upon him from the back of a folio. Tears burst from his eyes. That moment marked the commencement of the improvement, which finally ended in recovery."-Kussmaul.

Van den Abeele reports a case in which complete textblindness existed, though "the power of sight, the intellect, and the power of speech" were intact. The patient could read neither printing nor writing. "She saw the text, distinguished the forms of the letters, and could even copy the text, but was incapable of translating the words into spoken words and thoughts. She could comprehend pictures, and decipher a rebus." Disturbances similar to the above have been observed in connection with various other forms of sensation, e.g., in numbers and music. Cases are reported where a patient lost the understanding for musical notes, though he was still able to play well by ear. "Inversely, Lasègue saw a musician

with complete aphasia and agraphia, who could readily set down in notes any melody which he heard." Ataxic and other combinations of aphasia must be passed over. Any one interested in the subject should read the elaborate and exhaustive article by Kussmaul, in the fourteenth volume of Ziemssen's Cyclopædia of the Practice of Medicine. From the above cases we may reasonably infer that there is a centre in the cortex, where word-sounds are, as it were, stored or registered; and that without free access to this centre, the mind cannot make use of such symbols. This access, moreover, can be cut off without destruction of the centre itself. Similarly, there is a cortical centre where word-images are registered, and if that centre be interfered with, the mind cannot read or make spontaneous use of written language. Memory for words, whether spoken or written, is a cerebral fact just as much from a sensory as a motor point of view. Though the way in for these sensations may be perfect, for either set the way out may be blocked; the motor centres where word-sounds and word-images are engraved in motor language, may be destroyed or out off from the higher centres. The losses occasioned by cerebral lesion may be most curiously partial-affecting groups of words, special words, or only parts of words-showing how very definite the localisation must be.

The researches of Ferrier might have led to the supposition that the centres of sensation and of motion thereby revealed were terminal. At one the physical impression produces sensation, at the other the will originates motor But this view is not favoured by pathology. There are still wheels within wheels. All evidence so far adduced goes to prove that in addition to most highly specialised sensory and motor centres, there is a special centre for ideation, and that there may be others for higher faculties still. Perfect ideation may go on in the absence of word sounds or images, and the individual may retain his intellectual vigour. But there are further lesions which deprive a man of the power of intelligent action, and produce symptoms which cannot result from mere disorder of the receptive and motor centres. Such cases are most difficult to study, as we lose the aid of the patient himself. They at least warn us to beware how we limit the perfect fitness of the instrument to the agent, how we deny a physical substratum for those processes which are apparently

" purely mental." In connection with this subject we may note that, according to Professor Bain, "Renewed feeling occupies the very same parts, and in the same manner as the original feeling, and no other parts, nor in any other manner that can be assigned.' It is an interesting and not improbable suggestion that this may be true in the history of brain action, in so far as impressions on brain through the sensory apparatus are concerned. I incline to think the hypothesis in this restricted form highly probable. But everything which makes it probable in connection with the recalling of sensations, seems to me to make it improbable as bearing upon the more advanced forms of intellectual exercise." However far future research may press the registration of the antecedents of sensation, it can never abolish the distinction between voluntary and involuntary remembrance. The suggestion may come from without, or the search may be commenced within. Quite probably the same cells are concerned in each case, but the methods of origination of all action in the two are antipodal. Here we quite agree with Dr. Calderwood, but we hesitate to go further. It does indeed seem impossible that the brain can store up all sensations, yet, in view of the cases already referred to, all theoretical arguments against the brain's capacity must be regarded with suspicion. Even if, with Dr. Calderwood, we lessen Bain's estimate of the number of cells, who is to tell us what each cell is capable of receiving? We have no gauge for measuring its powers, therefore it is useless to dwell upon the large number of acquisitions sufficient "to embrace the whole acquirements of the best endowed minds."

Dr. Calderwood instances the number of words which must on this theory, apart from the thousands of other sensory impressions, be registered in the brain. "Shake-speare is reckoned to have used 15,000 words, Milton, in his poetical works alone, 8,000; but these do not include inflections of the same root. What shall we make, however, of a case like that of Cardinal Mezzofanti, who spoke fluently thirty languages?" Unfortunately this statement rather weakens than strengthens Dr. Calderwood's argument, and speaks in favour of the marvellous power of retention possessed by the brain. Nothing is more clearly taught by pathology than the fact that the memory of

[•] Pp. 272, 273.

[†] P. 277.

words is dependent on a definite centre in the brain, and that the registration is most minute. Therefore the case of Cardinal Messofanti does great credit to these receptive with their corresponding motor centres. But to return: the simplest facts of mental life, sensation and discrimination, are not accounted for by cerebral action. The facts of physical and mental life, in their properties as in the methods of their acquisition, are essentially distinct. No two-sided substance possessing their antagonistic properties will suffice for the problem. It is in this perfect distinctness of character rather than in any non-correspondence between the relations of mind and brain that the dualist must rest, and in what Cooke calls Hermann Lotze's supreme argument, the unity of consciousness.

Having detained our readers so long over the sensory system, we must be content to deal with the alphabet of the motor system. Studied from a purely physical standpoint, reflex and sensori-motor phenomena are observed. There is also probably automatic action of certain centres, presiding over such organic processes as respiration. Though susceptible to influence through afferent nerves. they can carry on their work in absence of such stimulus. according to some physiologists of note. How this is accomplished, is equivalent to asking how the functions of the body are performed and its integrity maintained, when purely physical processes left to act on the system reduce it to dust. Life is behind it all. The vital force of the older physiologists, viewed as an ultra- or supra-mechanical power, is by no means extinct, but probably destined to play an important part in the physiology of the future. This view does not negative the alternative expressed by Dr. Calderwood on page 49; it only demands that the animal part of man's nature is not explained by physical law. There is, however, an exercise of motor power, termed voluntary, which no physical or vital force will explain. But in studying this we pass again from external to internal evidence. We are conscious of the frequent occurrence of many purely reflex acts; but in contradistinction to these, movements originated by ourselves are the daily experiences of our mental life. Self-consciousness affirms that they are not mechanically reflex. My pen might lie within reach and in full view of the eyes for hours, but no reflex act through the optic nerve would cause its intelligent use. In raising it I assert my independence of mechanical stimulus, and in using it I exhibit a selection of words for a definite end, which no

power in the organism can account for.

In the human body there are the most delicate inhibitory mechanisms. One small nerve, easily isolated in the rabbit, conveys messages from the heart to a centre in the medulla which presides over the calibre of the arteries; the result is not an increased but a diminished contraction of the muscle-fibres surrounding and forming part of the walls of the vessels of a large area of the body, and so either a fall of blood-pressure or accommodation in the arteries for a large quantity of blood. Consciousness tells us nothing about these subtle inhibitory processes. But there are inhibitory messages which I am conscious of sending myself:

"We are here brought to the threshold of the whole problem concerning will-power. That power is recognised working in relation with nerve force, but it is recognised as also distinct from it, and the distinction is all the more clear on account of the diversity of law operating in the two cases. The one power comes into competition with the other, thereby affording the best possible means of experiment in order to establish difference.

"It is recorded of an able-bodied seaman that, after having quietly submitted to an operation, he cried out when a needle was run into his arm by the dresser who was binding up the wound. The dresser expressed surprise that one who had endured the operation itself so quietly should cry out under the puncture of a needle. To this the sharp-witted tar promptly replied, that he expected the out of the knife, but he did not expect the prick of the needle. Expectation and the preparedness of mind it implies makes all the difference, and that difference is as wide as the distinction between voluntary and involuntary action. Two forces meet, and the will-power masters the nerve-power, the result being inhibition of motor activity; that is, an effectual restraint on the ordinary law of action, which regulates the sensory nerves and cells with the correlated motor cells and nerves."—Pages 239, 240.

We cannot here pursue the subject into its higher developments. Once more, however, we must insist on the facts of self-consciousness being placed at least on a par with those coming to self from without. Physiology may not reveal will-power, but self-consciousness does. In all his researches the physiologist depends on the trustworthiness of his own consciousness: if it be a veracious witness for

things without, its evidence must not be denied for things within.

Dr. Calderwood devotes an interesting chapter to the investigation of some problems raised by the facts of weariness, sleep, and unconsciousness. There can be no doubt that intense continuous mental action produces nervous exhaustion, using up the stores of energy in the system as effectually as the most energetic bodily exercise. Is thought therefore a "function of the brain," or, adopting a less extreme hypothesis, is there no mental action apart from cerebral action? In discussing this question, it must not be forgotten that, within limits, "all human labour is brain work, and all the work done by the lower animals in the service of man is also brain work." We say within limits, for though voluntarily originated through the cerebral cortex, much mechanical work may become so completely reflex as to go on through centres lower than the cortex. The frog jumps and wipes an irritating substance off one foot by the apparently intelligent use of the other; the fish swims: the bird flies: and all this after the removal of the cerebral cortex. So walking and acquired manual acts in some manufactures may become practically reflex. Whatever call is made upon the brain is chiefly in connection with the motor centres. "There may, therefore, be a lifetime of brain work with comparatively little exercise of thought." But intense thought readily produces nerve exhaustion. If intellectual action be purely mental, how does this come about? Dr. Calderwood thus classifies the forms of brain action attending on the more ordinary forms of mental exercise:

"(1) Action of the special senses and of the general tactile sense; (2) action of the muscles concerned in the management of these senses, and specially of the organs of sight; (3) co ordination of sensory and motor apparatus required for the use of the senses; (4) action of sensory centres consequent upon use of the imagination, in part a renewal of sensory impressions, or a movement of the sensory cells consequent upon stimulus which imagination supplies; (5) sensory and motor action consequent upon the stimulus coming from mental emotion, such as weeping, facial expression of sadness, or sympathy. These are generally recognised phases of brain action closely connected with mental action. If only allowance be made for a possible diversity of opinion under the fourth head, it may be regarded as almost undisputed that all these attend on 'mental activity.'"—Page 328.

"All thought proceeds, to a large extent, by the use of language, and

thus seems to involve activity of the cells concerned with the acquisition and use of language and speech."—Page 330.

After what has been said on aphasia, little additional proof is required to substantiate the above propositions. Often, when much interested, our thoughts are unconsciously expressed by lip movements or audible words, indicating the activity of the corresponding centres. If with intense thought the energy thus overflows the cells and streams out towards the periphery in sufficient quantity to affect the organs of speech, a less intense movement in the cells may be reasonably assumed to take place in ordinary thought. When recalling and recombining sensations under the guidance of imagination, we may rationally infer the activity of the cells concerned in the production of these sensations. As such cells, unlike those of motor centres, form the terminus and not the starting-point of nerve currents, their activity can only be grounded on accompanying motor manifestations. Thus we find the voluntary recollection of some savoury odour may stimulate the salivary glands to action. And one can well imagine how Charles Lamb's mouth must have watered as he thought out his Dissertation upon Roast Pig. The physical processes accompanying thought are quite sufficient to account for nerve exhaustion. At the same time there is an essential difference between "wool-gathering" and concentrated thought. In the former process the mind is left at the mercy of brain and sensory currents from without; in the latter brain is brought under the subjection of mind, and not only are the subjects consciously chosen. but everything interfering with their consideration is determinately excluded:

"To leave the senses open to every kind of impression that can be made upon them, allowing the mind to be altogether under guidance of our sensibilities, is the easiest of occupations. But to concentrate the mind upon some abstruse subject, to be carefully thought out in all its aspects, is not only high mental work, but it implies hard physical work, in order that what is intellectual may be carried through with success. It implies a deliberate and well-sustained guard put upon the senses, that they may not prove hindrances to us. Every one who has trained himself to such work knows well that it is physical work as well as mental."—P. 832.

"These considerations lead naturally to the conclusion that only a limited portion of time each day can be appropriated to such employment: And, as all nerve action involves weariness, with demand for nourishment and rest, we are naturally led to consider the phenomena of sleep as these are concerned with the relations of mind and brain."—P. 333.

The requisite periods of rest and exercise for brain and muscle, though capable of variation, are so timed as roughly to correspond with the periods of day and night; very inconvenient indeed would it be if it were otherwise. Though obtaining general rest at night, all organs are not ruled by the same laws. In sleep, the rest of the executive of the organism, "the sense of sight, the most restless and active during waking hours, has the fullest advantage from slumber;" whilst the skin, ear, and nose have their nerve mechanisms most exposed to external stimuli. In spite of the seeming rest of the body, we are often conscious of an active life within, displayed in the phenomena of dreaming. Undoubtedly this is a much more frequent process than is ordinarily imagined, for memory, on waking, is a very deceptive test of the number and extent of our nocturnal wanderings. The experiments made by Sir William Hamilton confirm the frequency of dreaming:

"I have always observed that when suddenly awakened during sleep (and to ascertain the fact I have caused myself to be roused at different seasons of the night), I have always been able to observe that I was in the middle of a dream. The recollection of this dream was not always equally vivid. On some occasions I was able to trace it back until the train was gradually lost at a remote distance; on others, I was hardly aware of more than one or two of the latter links of the chain; I sometimes was scarcely certain of more than the fact that I was not awakened from an unconscious state."—P. 844.

The question raised by the phenomena of dreaming is thus put by Dr. Calderwood:

"If mental phenomena be the product of brain action, or even if they be uniformly connected with activity of brain, rest of the nerve system in sleep should practically terminate mental activity for the time. But if mental phenomena imply the action of a higher nature distinct from the body, though existing in closest union with it, all that will follow as the result of alumber will be a cessation of those forms of mental action concerned with the use of the senses, and the management of bodily movements,—some limitation or modification of such mental exercises as are intimately

connected with bodily life, with a possibility of independent mental action in harmony with the mental training of the individual."

—P. 884.

It must, however, be observed that as we have no certain criterion of the perfect functional rest of the whole brain, any distinction betewen purely mental and combined dreams must rest on the assumption that certain phenomena are entirely extra-physical. Facts abundantly demonstrate the possibility of the functional activity of the cortical cells apart from any stimulus through the organs of special sense. One grain of opium, so distributed through the system that only an infinitesimal portion can be present in any given part of the cortex, so delicately influences the sensory centres that the most gorgeous visions ensue. These may involve not only "restoration of past relations, in strict accordance with the state of matters at the distant period," but also the recombination of past sensations in kaleidoscopic variety. The mind observes all as an outsider, and wonders what enchanting transformation will occur next. However the registration of the past be accomplished, mental action is consciously secondary. The apparent use of the imagination may be the result of physical changes. Scrooge, in presence of Marley's ghost, philosophises in a perfectly scientific manner. "You may be an undigested bit of beef, a blot of mustard, a crumb of cheese, a fragment of an underdone potato." or some still more subtle abnormality.

"While the senses are sealed in slumber the imagination is often occupied with a representation of scenes and occurrences such as are recognised by the senses."—P. 338.

This is, however, no proof that such phenomena are purely mental. Adequate provision has been made for the possibility of cortical activity during the functional rest of the basal ganglia intervening between the organs of sense and the cerebral surface, and vice versā. The beautiful and elaborate researches of Duret and Heubner on the vascular supply of the brain demonstrate the independence of the cortical and basal systems. Physiology, moreover, teaches that local changes in the calibre of these vessels, causing anæmia or hyperæmia, may be produced through the vaso-motor nerves. Hence we must admit the possibility of local as well as general "sleep" of the ganglia and cortex. Once allow the localisation of cerebral functions,

and this fact has a wide application, throwing light upon many peculiar phenomena. What can we call the ansesthesiæ, developed in connection with hysteria, but profound sleep of the cerebral sensory system? Sight, hearing, power of perceiving touch, pain, temperature, &c., all are gone! Yet the motor powers and individual consciousness remain intact. The change is physical, for the phenomenon is almost invariably unilateral. Similarly, in the same disease, prolonged loss of consciousness may occur, whilst local or general functional rest or hyper-activity of motor centres not unfrequently falls under the notice of the physician. Many cases of somnambulism, on the other hand, illustrate the activity of one or more sensory organs and tracts of the motor sphere, whilst self-consciousness is in abeyance. Considering the elaborate regulative mechanisms which preside over the organic functions of the body-interpreting without mistake the most delicate messages, unfelt by the individual—we cannot be surprised at the marvellous delicacy of discernment shown by the higher centres when liberated from the interference of their fallible governor. Actions which the ego would shrink from, or perform with clumsy adaptation of means to end, they accomplish with the utmost exactitude. We believe the doctrine of cerebral localisation has a sound basis, and, when more fully developed, will help to explain many of the complex states the discussion of which somnambulism suggests but ignorance forbids. Though we cannot accept the presence or absence of weariness as a safe index of the origin of a dream, though we hesitate to adopt as an argument in favour of purely mental exercise the fact that, in his nocturnal wanderings, the poet is still a poet, the orator an orator—for peculiarities of mind probably entail peculiarities of brain-yet that behind the physical there exists an immaterial being, at times unmistakably shining forth, we are fully persuaded. The facts require it. The distinct action of the ego during many dreams and acts associated with sleep is undoubted. But for ·illustrations of this, and an amplification and development of the subject in connection with man's higher faculties, we must refer our readers to the work itself. Dr. Calderwood writes with such admirable simplicity, that those unaccustomed to scientific terminology will find no difficulty in comprehending his meaning. Although this treatise takes honourable rank amongst the literature of to-day, the

physio-psychologist of the future will doubtless smile at the rudimentary physiological basis on which its arguments rest. As yet the very alphabet of cerebral localisation is incomplete. A few bold characters stand out here and there, but the great majority are still undeciphered. The life-work of generations of zealous investigators is still required to determine the letters, spelling meanwhile here and there a word. But the sentences and the finished volume of this section of the book of nature are not yet within reach of the telescope of science. If the day should ever come when, not as now afar off, but in its microscopic detail, this wondrous composition should reveal itself, there will still be critics of the language, still also those who, blessed with the power of appreciating that which is rather than of detecting that which is not, will revel in its subtle beauties, and, with Dr. Calderwood, will trace in all the penmanship of its Divine and ever glorious Author.

ART. VII.—Is Life Worth Living! By W. H. MALLOCK. Second Edition. Chatto and Windus. 1879.

Many consider the question raised by our author a "aickly" one, and one not to be entertained by healthy minds. The multitude, we are reminded, find pleasure in living—in the loves, activities, ambitions, and hopes which occupy our mortal lives-and all questionings into the worth of life are morbid and unprofitable; we feel life to be precious, and that is enough. It is not enough. It might be enough, perhaps, if the doctrines which underlie the present popular idea of life were left undisturbed—if the existence of God, the moral ordering of the world, the hope of immortality, were to continue popular convictions or assumptions; but if the supernatural must now be denied, the reconsideration of the value of existence becomes a legitimate question to which a definite and logical answer must be given. That the unthinking multitude are contented with life, or that the multitude who consciously or unconsciously assume the truths of religion are contented with life, cannot demonstrate the preciousness of existence to the reflective soul which has lost faith in the supernatural, and which looks all the facts of the case full in the face.

Optimistic atheists assure us that should the prevalent unbelief of our times settle into a general and emphatic rejection of the supernatural, it would not affect the popular conception of the value of life; that is fixed in the common mind beyond possibility of disturbance: practical life is little affected by our creed, and the love of life is an instinct not to be destroyed. With this position we cannot That practical life is little affected by our creed is a view condemned, directly or indirectly, by all who enter into controversy on the fortunes of our race. The most obvious rebuke to this superficial notion is the eagerness of those who hold it to give us what they consider a true creed. If our faiths and philosophies have so little to do with action and conduct, if the spontaneous impulse is so much better than the unreasoned conviction, if the universe calmly proceeds on its way fulfilling itself inevitably at every point in us or by us irrespective of our

beliefs, if what is good for man infallibly persists through "all disturbance of opinion and whirlwind of destructive theory," why do these complement parties so passionately condemn the creed they believe to be false? or, why do they so warmly espouse some other creed opined to be true? Would not the logical course be to let all things drift and for us to drift with them? At bottom, however. all reasoners feel that ideas rule the world; that the theories we frame of ourselves have much to do with the shapeliness or unshapeliness of our lives; that the theories we frame of the universe have great influence on the development or retardation of society. The instinctive, no doubt, plays its part in our complex life; but we must reason, and our philosophies are potent factors in the story of the world. That the worth of life is an instinct which cannot be seriously impaired is also a position we greatly doubt. That we have a natural and instinctive belief in the worth of life must be allowed; we feel somehow that it ought to be a grand thing to live; life is the name for reality, and the prime condition of blessedness. But, on the other hand, we are confronted with a world teeming with tribulations; our spirit is oppressed by infinite mysteries and sorrows; the sadness of life is too real to be denied, and too tragic to be exaggerated. Our Will that instinct experience contradicts our instinct. survive in unimpaired efficacy when the religious solution of this painful problem has been rejected? We believe anite otherwise.

There is a disposition in many of our lighthearted teachers to scoff at pessimism as a very shallow and pitiable thing, to stigmatise it as an aberration of thought—an obviously irrational philosophy which has no chance of a wide or enduring popularity: the pessimist is an erratic soul, "wailing his monstrous melody to the moon." Thus Professor Blackie affects to dismiss the tenet of Buddhism, that human existence is an evil: "Existence, taken as a whole, is as preferable to non-existence as light is to darkness, or a glass of cool water or warm port wine to an empty tumbler. To say that existence is an evil is to spit in the sun's face because some persons have cataract." The justice of this reasoning is in inverse proportion to the smartness of the expression. Pessimism

^{*} Natural History of Atheism, p. 160.

has a great deal to say for itself, and is not to be dismissed in this contemptuous fashion. This world resembles the "wretched valley" of which Dante writes: "There it was less than night, and less than day;" and the enigma we have to solve is far more puzzling than the choice between light and darkness. Neither is ours the simple alternative between the glass of cool water or warm port and the empty tumbler; much rather is it between an empty cup and one of wormwood which we must drink with many tears. And pessimism is not so much the insult of a diseased eye to the sun as the plaint of a pilgrim sinking in the wilderness under the pitiless heat of the day. If existence had been as preferable to non-existence as Professor Blackie's vigorous imagery gaily assumes, there would hardly have been as much instintive and reasoned

despair as we find in the world to-day.

We object also most decidedly to all attempts to discredit pessimism by considering it as the expression of morbid temperament. Mr. Sully writes: "Pessimism may be regarded in a large measure as a distinctly pathological phenomenon." Again: "If ever a complete science of health shall exist, and the deepest condition of mental as well as bodily welfare be ascertained, we may, perhaps, without being utopian, predict a period when the dreariest form of pessimism will disappear, together with the peculiarities of temperament which underlie and sustain them." In keeping with this theory the same writer regards Schopenhauer's philosophy as the outcome of a physical defect; he had some "taint of blood" which served to impress on his habitual consciousness its gloomy We think the attempt to dispose of pessimism as a pathological phenomenon a very transparent artifice. It is simply begging the whole question. Insanity is sometimes moody, sometimes laughing; and if a gloomy philosophy is to be considered the sign of cerebral disorder an optimistic theorist may justly be considered to suffer from the same malady. There is a true pessimism which no taint of blood explains, and no science of health will remove; or, if pessimism must be considered as pathological, it is the consciousness of universal rather than of personal disease and disorder. Pascal comes to the gloomiest conclusion touching our nature and situation;

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vet what justification have we for ascribing any malady to him, except on the grounds of his philosophy? He was full of vivacity and humour, and not disinclined to fashion and pleasure. His dark philosophy was the logical result of musing deeply on the problem of life from a naturalistic standpoint. No man would have been happier in Paradise than Pascal. Thus with Heine. The soul of this brilliant genius was overwhelmed with the tragic aspect of existence. He did not pluck darkness from the light, or distil acid from honey, or wantonly trample under foot sweet flowers which wooed him to brighter thoughts; he simply reproduced life as he vividly saw and keenly felt it without the interpretations and consolations of faith. His was not a false view of an harmonious world, but a deep view of a world full of cruel sorrows. He had the heart to sing sunnier songs if the land had been less strange. Much of this is true of Schopenhauer. He had a keen relish for pleasure, an enthusiastic love for painting and music; and had he been set down in a fairly-balanced world it seems very probable that he would have enjoyed himself thoroughly and championed no misanthropical creed. Schopenhauer had a great mind and a sound one, but unsustained by religious hope he fainted under the terrible burden of this strange, sad existence. Our modern atheistic comforters tell us to cultivate the habit of looking at whatever is hopeful in life, and, studiously keeping the things of dread out of sight, to fix the eye on the starry points of brightness and ignore the gulfs of gloom; but the truth is, the great sorrowful world forces itself upon us whether we will or no, and the noblest, healthiest, purest minds have sighed the most deeply, oppressed by the mysteries and miseries of existence. Pessimism may sometimes be the expression of a morbid brain, just as a chattering cheerfulness may of a weak brain, but far more frequently it is a mournful conclusion forced upon strong and unwilling minds.

Neither can we concede that disgust with life is to be reckened as the result of a specially unfortunate environment. That "the habit of looking at the night side of life vanishes and appears unnatural amid the passionate glowing nature of a southern sky," is a statement needing considerable qualification. The despairing philosophy

[.] Miss Zimmern's Life of Schopenhauer.

which has become so popular amongst us has been adopted from the East. The most profound and pathetic lamentations over the emptiness, the evanescence, the bitterness, the purposelessness of life, come to us from the rose-gardens of Persia, the palm-groves of India, the gorgeous landscapes of Ceylon. Neither can it be admitted that pessimism is the result of unfortunate individual or national circumstances. Men who entertain cheerless views of life are supposed to have been unfortunate, afflicted, poor; the times in which pessimism has flourished are supposed to have been epochs of disaster. This is a very inadequate explanation of the discontent with life which finds such constant and piercing utterance. The Archbishop of York propounds a truer view: "The sense of despair is oftener associated with well-being and prosperity than with times of struggle, even the screet. was a king who said, 'I, the preacher, was king over Israel in Jerusalem. I have seen all the works that are done under the sun; and, behold, all is vanity and vexation of spirit. That which is crooked cannot be made straight, and that which is wanting cannot be numbered. In the story of Cakya Mouni, the founder of Buddhism, it is a prince of heroic achievements in the games, of great culture, beloved of a fair wife, heir to a sure throne, upon whom the sense of the pain and misery and futility of the world breaks with full force, and drives him from riches, and wife, and crown. In the midst of the prosperity of the age of Augustus, when the great empire threatened to fall asunder by its own weight, a strange, restless lassitude fell upon Roman society." And it is thus with our own generation. Amid arts, culture, wealth, luxury, and splendour, we are formulating philosophies of despair and preaching terrible gospels of redemption from the miseries of existence. When we turn our eyes from the palaces which adorn our colossal cities, the banquets where purple greatness fares royally, the brilliant fashions which light the streets, from the theatres, museums, and galleries, the splendid triumphs of art, science, commerce, and industry. and all the teeming and ostentatious treasures of our civilisation, to the gathering gloom of the public mind which is reflected with more and more painful distinctness in the higher ranges of our current literature, our age

^{*} The Worth of Life.

irresistibly reminds us of the bride of Giacopone di Todi, who, crushed to death on her wedding-day, was found with a robe of sackcloth next her skin, hidden beneath the glittering bridal raiment. Our pessimism does not come with our crowns of thorn, for no sigh is more real, more sad, more strange, than the Sybarite's from his crumpled rose-leaf:

"With pleasure drugg'd, he almost long'd for woe,
And e'en for change of scene would seek the shades below."

The inquiry into the worth of life cannot be dismissed as the quernlous complaint of a sick brain, if we remember on what grounds the question is raised, and how largely it has been answered in the negative. We must recognise the reality of evil and suffering. It is a mocking sophistry which denies the existence of disorder and pain; and the gospel of comfort which counsels us to avert our gaze, ostrich-like, from disagreeable things, is too shallow to need much comment. Mr. John Morley's advice is sound: "We ought not to hide from ourselves the desolate plight in which we are left." But we are told by meliorists and optimists that whilst good and evil, pleasure and pain, are in the world, there is a preponderance of good and pleasure, and they go into long calculations to prove that this is the case. These calculations are eminently unsatisfactory. The hedonist brings his scales into a world for whose levity he has no balance delicate enough, and for whose gravity none strong enough; the most exquisite instruments of chemist and astronomer are no use here; Heaven alone has the gauges and mathematics to resolve the respective proportions of joy and sorrow in that world called the human heart, which is more mysterious than the earth beneath us, or the firms-Suppose, however, that it could be ment above us. demonstrated that there are more pleasant than painful things in life, and that pleasure is of longer duration than pain, this demonstration falls a long way short of proving what it is thought to prove, viz., that life is fairly happy. The hedonist seems to forget the pervasive power of evil and pain. Evil may be a mere grain in comparison with the sound bulk of life, and yet a grain of poison can vitiate a vast organism; suffering may be only one faulty string in the harp of life, whilst all the rest are tuned to grateful music, and yet one dissonant

chord spoils a world of music; and if sorrow be but a drop in relation to the whole of life, it is the drop of wormwood that spoils all the sweetness of life's cup. The happiness or unhappiness of mankind cannot be determined by the elaborate calculations of the hedonist; it can only be determined by the consciousness of the individual and the general consciousness of the race. There can be little doubt as to the nature of this testimony. Miss Bevington affirms that "the obviously interested way in which life is lived by the vast majority, shows that this world affords enough to make their share of conscious existence worth the having." And then we are told that the views of life entertained by men whose life is nearly spent are not to be considered. We submit that the testimony of reflection and experience is the only testimony admissible; and this testimony—so far as men have lived secular lives—is

notoriously pessimistic.

The greatest men of all ages have acknowledged the vanity and sorrowfulness of life. The Greek nation in the excitement of their wondrous age might lose sight of the tragic side of existence; but their poets and philosophers saw with infinite distress the dark background of the gay picture. The perception by Shakespeare of the dark and bitter mystery which encompasses human life, and of the inevitable woes which afflict our hearts, is the pathetic charm of his pages; the secret of his power is in the fact that he is spokesman for the army of the mourners. Goethe, who sought to enjoy and paint the fairest phases of life, confessed in conversation with Eckermann: "I have always been looked upon as a favourite of fortune: neither will I bemoan myself or accuse my course of life as unworthy. But yet, after all, it has been nothing but labour and trouble, and I may well say that in my seventyfive years I have not had four weeks during which I could enjoy life. It has been the eternal rolling of a stone which must be constantly moved afresh." Byron tried life on another side, with the conclusion, "'tis better not to be." Humboldt, after a long life of ennobling action, wrote: "I was not born in order to be the father of a family. Moreover, I regard marriage as a sin, and the propagation of children as a crime. It is my conviction also that he is a fool, and still more a sinner, who takes upon himself the

[.] Quoted by Martensen, Christian Ethics

yoke of marriage—a fool, because he thereby throws away his freedom, without gaining a corresponding recompense; a sinner, because he gives life to children, without being able to give them the certainty of happiness. I despise humanity in all its strata; I foresee that our posterity will be far more unhappy than we are; and should not I be a sinner if, in spite of this insight, I should take care to leave a posterity of unhappy beings behind me? whole of life is the greatest insanity. And if for eighty years one strives and inquires, still one is obliged, finally, to confess that he has striven for nothing and has found out nothing. Did we at least only know why we are in this world! But to the thinker everything is and remains a riddle; and the greatest good luck is that of being born a flathead." And with these estimates of life Schopenhauer agrees: "The basis of all man's being is want, defect, and pain. While the most complete objectification of will, man is by that same fact the most defective of all beings. His life is only a continual struggle for existence, with the certainty of being beaten!" If it be objected that this is philosophy and not testimony, all acquainted with Schopenhauer's history know that his expositions are as much experience as philosophy. "The sense that life is a dream or a burden," says Max Müller, "is a notion which the Buddha shares with every Hindoo philosopher."- In India and China are more than three hundred millions who believe that existence is a curse. And when in our day we see the youthful West, rich in knowledge and invention, flushed with many victories and delights, dowered with the spoils of all time, to which she has added new and mighty treasures of her own, turning away from all with disappointment and bitterness, to accept from the hoary East that dogma of despair which is the sum of her long experience, we have a new and impressive illustration of the great Apostle's lament: "For we know that the whole creation groaneth and travaileth in pain together until now."

The optimist has a comparatively easy task to prove that we ought to be happy. It is here that Schopenhauer is hopelessly wrong in dealing with the problem of life; for, according to his theory, the substance of all nature and existence is vicious, the evils of human life spring from

^{*} Quoted by Professor Bowen, North American Review, Nov. 1879.

the nature of things, all beings and things are necessarily full of blind striving and pain, and in human consciousness the horrible tracedy is consummated. It is not difficult for Mr. Sully, or any other optimist, to show how full of errors is the theory of Schopenhauer, and how utterly grotesque his metaphysics. That the basis of all things is good, that the primitive and essential arrangements of the world are on the side of enjoyment, that life might be, ought to be happy—these are facts which the philosopher usually finds himself bound to admit, and which the theologian also fully recognises. But when the wild metaphysics of Schopenhauer have been criticised the fact remains which these metaphysics were intended to explain, viz., that men are not happy, that the sense of life is the sense of longing or satiety, that our plans and purposes are broken off, that the noblest are the saddest, that if we come trailing clouds of glory we trail them through dirt and darkness, that we are persuaded of the emptiness of life, and yet sink into the grave with unspeakable sorrow. And herein is the sting of life. If Schopenhauer's philosophy were correct—existence being in itself a radical unutterable curse—unhappiness would be rational and despair instinctive: but with all our misery we feel somehow that the misery ought not to be; we are haunted by a fairer ideal of existence; we have around us the grand apparatus for enjoyment, and yet cannot get the thing; the woe of life is, we know it ought not to be a woe; gladness so grand, and so passionately desired, so nearly misses us. The value of life is an instinct, the most powerful instinct of our nature; and yet the million finishes the story of love, ambition, pleasure, study, comfort, by declaring that the game is not worth the candle.

Revealed religion has a consistent explanation to this strange contradiction, in its doctrine that all things were created good, but the creation has suffered in the moral imperfection of man; it sets over against the felt vanity of worldly life, the moral aim of life—the immortal perfection of the individual; amid a thousand discouragements it gives promise for the future of humanity; and it assures us the sufferings of the present time are not worthy to be compared with the glory that shall be revealed in us. Atheism denies all this, and unable to give any feasible solution of the problem of evil lands us in despair. It is no accidental thing that pessimism follows atheism; it is

the logical sequence. Mr. Sully affects to deny the connection between the infidelity of our age and the revival of despairing views of life. "Modern pessimism shows itself on a little consideration to be no natural logical development of European thought." Then proceeding to find the explanation of the popularity of pessimism in the literary merits of Schopenhauer and Hartmann, and in certain passing political and social phenomena. The explanation must be sought deeper down, and will be found to be the natural logical development of that atheistic thought which has prevailed so largely of late years in Germany. Atheism and despondency go together in the East by no accident, and it is for no superficial cause that they reappear together in Christendom; they are inseparable, as death and the grave are. Infidelity may disown its ugly child, but the kinship is palpable. The saturnine philosophy which is now filling kings and peoples with alarm is not to be explained by phrenological developments, atrabilious temperaments, the action of economists or statesmen, but by the spread of that atheism which denies all that makes life precious.

Pessimism owes its revival partly to the modern scientific conception of nature. In the past, when the Paradise of God was denied, men turned for consolation to this beautiful world as to an earthly Paradise. rejected, an abundant optimistic theology was found in nature. Paine could say, "The creation we behold is the real and everlasting word of God; it proclaims His power; it demonstrates His wisdom; it manifests His goodness and beneficence." Sceptical romancers found in nature a paradise with no sign of a fall. Rousseau and his dreaming school were intoxicated with the lights and colours, the songs and spectacles of creation; amid the sweetness of spring mornings, the minstrelsy of summer days, the tender lustres of moon-lit landscapes, the vexations and tragedies of existence were forgotten. Thus the atheistic poets sought rest to their soul. Byron, Keats, and Shelley recognised in the universe, order, harmony, and beauty, in the contemplation of which they found an anodyne to their sorrows. In violet skies, in the firestorm of suns and stars, in the wild music of ocean, in the bird-haunted forest and the bee-haunted flower, in the seasons changed from glory into glory, they found the ideal beauty, the spirit of love, the genius of order; and this

transcendence they worshipped with rapture. A thousand times do these bards of scepticism turn from the tyranny, lust, hate, and superstition of men, to revel in the vision of nature, whose gold they held was untarnished by selfishness, whose purple knew no stain, whose strength is guilty of no cruelty, whose exuberance knows no stint, whose mercy reaches to all her children, and whose infinite peace, if broken for a moment, is quickly restored, as her harmonised forces pass beneath the rainbow's triumphal arch.

"Look on yonder earth:
The golden harvests spring; the unfailing sun
Sheds light and life; the fruits, the flowers, the trees,
Arise in due succession; all things speak
Peace, harmony, and love. The Universe,
In Nature's allent eloquence, declares
That all fulfil the works of love and joy."—Shelley.

But modern science has given quite another interpretation of our environment, and with a flaming sword driven us out of the earthly Paradise. Nature, it is discovered, is full of war, cruelty, ugliness, disorder, and misery; and so far from looking from man to nature for comfort, we must look right away from nature with its inconsequence, waste, and truculence, to that very human society which has been so bitterly censured through the ages, not by theologians only. but by poets and philosophers of every school. "No one," says Perthes, "has yet attempted to bring before the mind of the present age a lively picture of the horrors of nature, and the cruelty of her operations; and to show that they who would infer the existence of God from the goodness and wisdom therein displayed must needs fail unless they would be satisfied with mere rhetoric." This "lively picture" has, however, been furnished by J. S. Mill in his famous essay on Nature, and no such terrible picture of our environment was ever painted before. If Spinoza regarded the immanent principle of all things as an infinite perfection, modern science teaches that the immanent principle of all things is infinite imperfection. Mr. John Morley reminds us that the "heaven" of positivism "is an evercloser harmony between the consciousness of man, and all the natural forces of the universe." + But what kind of heaven will this be? What rare felicity shall we know

† Uritical Miscellanics, p. 527.

[·] Quoted by Archbishop of York, Worth of Life,

when our consciousness has been harmonised with the natural forces of the universe? If our environment is made up of blind, purposeless, pitiless forces, there is the promise of a very modest Paradise; of all the heavens men have dreamt this would seem the least desirable. Is it not a summons to Pandemonium?

Nature is not to us what it was to the Greeks; not to us what it was to our fathers. For certain positivists, who fully accept the modern way of looking at nature, to talk of science furnishing "new and imposing ideas," "noble imaginative forms for the emotional aspirations," "large and fruitful ideas," is simply nonsense; it is a glaring attempt to have your cake in poetry after eating it in science. Mr. Sully falls grievously into this error: "There is little doubt that the ignorant man feels much more of painful than pleasurable agitation in presence of the phenomens of pature; and even the mythic fancies which his emotions, led only by his few crude perceptions, are able to beget, as often bring anxiety and fear as trust and hope. On the other hand, the ever-widening field of phenomena opened by science would seem fitted to excite a much more refined and pleasurable, even if less intense, emotion of wonder. Can any thoughtful mind really believe that the whole condition of mind of a savage, when it confronts nature, is preferable to that of an educated member of a modern community?" * What refined and pleasurable emotion can this universe give to us when science has shattered its painted mask, and revealed its repulsive features? The untutored savage finds in the spectacle of the world a mysterious joy, as many a wild myth or song testifies; the ploughman on the mountain side gazes in sweet affection on blossom or bird; but what shall gladden the educated infidel, who knows nature as a field of blood. a school of vivisection, a theatre of horrors? To hear Miss Bevington, in the face of all that Comte and Mill declare of the world around us, talking of this "dear life," reminds one of Mrs. Dombey's mother greeting the dungeons of Kenilworth as "ducks of places." No, no, if we must accept the modern scientific interpretation of nature, we must go to her no more for consolation. Schopenhauer did not realise this fully, and found pleasure in wild spots unspoiled "by the paw of the great egotist man;" his

^{*} Pearimirm, p. 864.

disciples, however, have pressed his doctrine to the logical issue, and refuse all sentimental opiates. Thinkers are becoming more satisfied that however bad human kind may be, their sphere is no better, and it is irrational to seek an assuasive in that "infinite blind pitiless might that encompasses the little life of the minute atom, man." Carlyle gives a touching picture of Danton retiring for a while from the seething city to rustic scenes: "The great heart of Danton is weary of it. Danton is gone to native Arcis for a little breathing-time of peace. Away, black Arachne-webs, thou world of fury, terror, and suspicion; welcome, thou everlasting mother, with thy spring greenness, thy kind household loves and memories; true art thou, were all else untrue!" This will not do any more. It is not improbable that revolutions will occur in the coming days, not improbable that Dantons will seek solace: but nature has been found out cruellest of step-mothers, and it were madness to seek her sympathy. Many of our savants believe that the red riot of Paris was a love-feast compared with the sanguinary scenes which blind force and cruel law create behind the bedizened curtain which charms the vulgar eye. The multitude may think little of these harsh teachings of naturalism; but they are deeply affecting master-minds amongst us, and adding consciously to the world's sadness. The Persian mystic, fixing his eye on a burning rose, sinks into a mesmeric ecstatic sleep, unconscious of all the grief of life; thus Rousseau, Shelley, Keats, gazed on nature until their pained sense was lulled. But modern science has rudely marred the soothing dream, discovering the whole mystery of iniquity in the thing of beauty, fixing our eye on the thorns which cause such cruel scars, and the black spider which crawls amongst the glowing leaves on bloody errand.

This view of nature excludes all consolations of art. Art is the one bright spot in the philosophy of Schopenhauer; burdened by the miseries of existence, esthetics give us a momentary joy; as the pendulum of life swings perpetually from hunger to ennui, art is the bright medium line touched for a moment. The cultured few are to find a Paradise for themselves in the world of taste. Here beyond the curse-bound universe they shall find a satisfying joy in exquisite tints and tones, forms and fancies, in embroideries, sprigs of

^{*} French Revolution, Vol. III. p. 214.

bloom, shells, pictures, sonnets, music. But can it for a moment be supposed that these delights can survive? the cosmic cataclysm will this dainty parterre escape? Nero fiddling whilst Rome was burning is a mere bagatelle compared with our children of sweetness and light toying with rose-buds under the ruin of earth and skies. But it will not do. If the sentiment or prejudice of Schopenhauer prevented him giving full expression to his system, his disciples, once more, have presented the naked logical issue. Julius Bahnsen rejects the pure delight of intellectual contemplation: "Since, according to Bahnsen, intelligent order and harmony of design are wholly absent from the universe, the scientific observation of the world, and the representation of it in the creations of art, so far from being a source of quiet joy, can only bring anguish to the logical and philosophic mind." Nothing, on their premises, can be truer. Art reflects nature and humanity, and a mirror only reflects what is placed before it. What kind of art will flourish when the modern conception of nature prevails, and the mind of men becomes familiarised, really familiarised, with the ghastly phenomena of the universe? Mr. John Morley comforts us with the observation: "There are glories in Turner's idealisation of the energies of matter, which are at least as nobly imaginative and elevated . . . as the highest products of the artists who believed that their work was for the service and honour of a deity." It will be remembered, however, that the religious idea pervaded that art-world in which Turner was nourished, and he had a very different idea of nature to the modern one. Art must follow nature, imagination metaphysics; and the Turners of the future, fully believing in the repulsive and maleficent aspects of nature and life, will soon find their idealisations sadly chastened. It is consistent to idealise glorious things into other shapes of glory, to rearrange beautiful forms into some new grouping; but to expect art to go on idealising gargoyles into angel-faces, shambles into paradises, and covering the ribs of death with cloth of gold, is to expect what we have no right to expect.

And will not the same result follow so far as art is concerned with humanity? Is not the secret of much art here—it flatters the sentiment of humanity? We love ourselves and our fellow-creatures, and so love to contemplate ourselves on

^{*} Pessimism, p. 107.

the poet's page and the artist's canvas. But how long will this survive our inexorable science? "There are very many persons who believe that the 'image of God' is unmistakably reflected in their own features. If the nosed-ape shared in this singular opinion, he would hold it with a better right than some snub-nosed people." * How long is art to go on painting humanity in the face of this grim jesting of science? As man's conception of himself suffers degradation, his pleasure in art must suffer also, as Queen Elizabeth turned from the mirror which reflected her faded Those who expect that sesthetics will survive to light the sad regions of atheistic life with flashes of beauty and joy, as the late expedition to the Arctic world found butterflies near to the North Pole, have very little warrant for their expectation. When we have no light from above, and none from beyond, and only a cruel environment which will crush us sooner or later, art will have no more

mission, and no more inspiration.

The depressing views of life which are being now so very generally entertained, are largely the result of the new interpretations of nature and life which recent science has enforced. Science has been dispelling illusions which have long delighted deistic poets and philosophers, and so far from finding behind the illusions facts bright or fair, it is quite the contrary; the glory of the world, we are assured, is a phosphorescent glory, whose correlatives are darkness, corruption, and death. Much that science has assumed in this matter is, no doubt, correct. The spirit in which many scientists write is much to be deprecated: many of their conclusions are one-sided, many of their assumptions may be considered doubtful or untrue; but we think that one part of their mission to this generation has been to show the groundlessness of naturalistic optimism. God did not curse the earth in vain; modern science demonstrates But, unfortunately, much of our science is atheistic. and therefore, demonstrating the disorder of the universe whilst rejecting the gospel of redemption, it clears the ground for those philosophies of despair which now spring up with such disastrous luxuriance. Astronomy, geology. biology, like so many angry shapes, have driven us in fury from the earthly Paradise, and barred its gates against our return; and as we turn away from the Angel of God and

Haeckel, Evolution of Man, Vol. I. 374.

His evangel with distrust or scorn, our generation feels once more within itself the sentence of death and the bitter-

ness of despair.

Pessimism, once more, owes its revival to the fact, that in taking the supernatural element out of morals, scepticism has taken away the prize of life. Mr. Mallock very justly assumes that the prize of life is bound up with morality; that whatever the prize of life may be, it must not be sought in any sensual gratification, but in the higher regions of just thought and noble living; that life is only worth having whilst it is regulated by a high morality. All parties are agreed upon "the sacred and supreme importance of a high morality, the essential superiority of virtue over vice, the absolute antagonism of right and wrong." Can this high morality, which alone gives sacredness to life, be maintained when the existence of God, the immortality of man, and the cognate doctrines are denied? Atheists are confident that it can: they are persuaded that the morality in the religious system has preserved the religion, and not religion the moralitymorality is the amber and religion the fly. doctrines of the creeds may go, but the obligations of virtue can be verified on positive grounds, and virtue become more attractive and practicable than it is at present. Leaving, for a moment, the abstract logic of the case, there is an appeal to the logic of facts, which must largely weigh in the determination of this controversy. We think it will not be difficult to establish these three positions:

The supernatural has been associated with the genesis of the high morality for the maintenance of which all parties now contend. Miss Bevington* pleads that there are other means of awakening moral emotion and aspiration than by transcendental appeal, and her words are worthy of special notice: "The moralist can only appeal to that in a man which is there to be appealed to, and it is ten to one whether any viciously disposed person could be made really virtuous in heart and life by another man's account of God (even a human Christ-God) and of heaven, who would remain insensible to an appeal made to whatever social, domestic, and human affections lie slumbering beneath his vicious tendencies. . . . A man

[·] Nineteenth Contury.

who could be persuaded to give up drinking, or thieving, or profligacy for the love of Christ and the hope of being with Him for ever in a heaven where such courses are utterly to be shut out, is a man in whom exist other affections than those of mere self-interest; and these affections will be quite as readily drawn out by a clearly and earnestly drawn picture of the piteous effects of his selfishness on any fellow-creature the sinner loves (or even towards whom he bears no ill-will), as by the picture of God's grief or anger. Let the moralist, believing or unbelieving, go forth among his fellow-creatures and try." Exactly so; "let him go forth and try;" an ounce of experiment is worth a pound of controversy. The Christian theory has been tried upon a wide scale and with indisputable effects; let the sceptical theorists submit themselves to experiment also. Some hope may be entertained of a speedy settlement of these controversies if atheists will proceed to test their speculations in actual life. Let them try the method so eloquently propounded by Miss Bevington in some savage island; let them try it in some of those lands with an ancient corrupt civilisation like India or China; let them try it in the slums of London or Liverpool. In these directions Christianity has won practical and indisputable triumphs; let Miss Bevington prove her faith by her works, and show atheism equal to the creation of a pure morality where none has existed before, or equal to the revivification of a morality long dead. We await with interest the result of the experiment.

The believing moralist has gone forth among his fellow-creatures with the story of God's love and Christ's merit and the hope of heaven; and a most intelligent and unexceptional witness, Miss Ellice Hopkins, in a book just published, furnishes a categorical and decisive answer to Miss Bevington. Miss Hopkins, feeling deeply the wretched condition of the lowest population of a large town, undertook a mission on their behalf, and herself preached to a rough, ignorant, drunken congregation made up of bricklayers, carpenters, navvies, shoemakers, gasmen, well-sinkers, farm labourers, with what effect she shall herself relate:

"I have often thought that if some of our great thinkers could have my problem to solve, it would be a very good thing for them. If only once they could wake up one morning, and find themselves with some thousand rough but shrewd fellows on their hands to

be saved somehow, saved in that grossly intelligible sense of the word salvation which even Mr. Voysey would accept—saved from sin and degradation. There they were: I could not get rid of them, waiting with their listening faces turned towards me; some intelligible theory of the universe I must give them to get them to square their lives in obedience to its laws. Would it be any use to tell them of a stream of tendency, not ourselves, which makes for righteousness? Alas! the stream of tendency with which they Were most familiar, made for the public-house and wife-beating. Or would it be any good to preach to them the 'method of Jesus.' the duty of self-abnegation, to these men who were driven, by every wild passion of their natures, to self-indulgence—passions that would make short work of any abstract notions, and could only be east out by some other passion of love and adoration, such as only a living person can inspire? Or was I to follow Mr. Herbert Spencer, and rise with them from the lower to the higher religion, and preach to them the great inscrutable power, to which neither personality nor emotion can be assigned, and expect that the knowledge of It would regulate their moral emotions, with which It was out of all relation? Or even preach a moral and beneficent Being, the Ruler of all things, far removed from them in altitude of His perfections and blessedness; when the misery and disorder of their lives was a proof either that He did not mind, or, if He did, didn't much care? Alas! I felt forlornly enough that my intellectual gospels had but one fault when brought into contact with the mass of humanity—they would not work. Only in the Christianity of the Bible could I find what I wanted. . . . And, however men may dispute over the theory, the atonement did become a great fact in our midst. Beneath the power of the Cross of Christ, I have seen four hundred rough, world-hardened, reckless mon, weeping and sobbing like children over their sins. I have seen, Sunday after Sunday, bad men turned into good by it, men who were drunkards, profligates, blasphemers, fighters, gamblers. turned into good, devout, tender-hearted men. For months I never spoke but this change took place, two or three thus receiving the word of life, and becoming completely changed men. How then can Christianity be anything but a great life-giving fact to me?"-Work Among Working Men, pp. 33, 10-12.

Let Miss Bevington go and do likewise—if she can.

So far as facts are before us, only the story of an infinite pity and an infinite love suffice to break up the great deep of the human soul, and to make possible a new and sublime morality. Where human affection is extinct, where a man is utterly dead to all appeals of human love or claims of social duty, the love of Christ has kindled life more pure and kind, and constrained to courses of loftiest righteous-

ness. No fact is better attested than that the love of God in Christ is the starting-point, alike in individuals and nations, for the highest morality and holiness. Beyington stumbles into the truth on which we insist, when she observes elsewhere, "It is in the case of the greatest criminality and least social sensitiveness that men chiefly require the menaces of supernatural creeds. The greater the advance that is made in social well-being, and the keener the sympathy of the individual with the experiences of the fellow-beings his conduct affects, the less is the need of transcendental fears." The supernatural may, or may not, be necessary for highly-cultivated persons; they may have cast off creeds as the flower casts off the sheath which protected it when a bud—that point we will reserve; but Miss Bevington is not altogether blind to the fact that with degraded people the upward movement of life commences with transcendental hopes and fears. Mr. John Morley goes further than the writer just quoted: "There is an immense class of natures, and those not the lowest, which the connection of duty with mere prudence does not carry far enough. They only stir when something has moved their feeling for the ideal, and raised the mechanical office of the narrow day into association with the spaciousness and height of spiritual things." Whatever may be the utility of religion further on, we find it presides over the genesis of morality in debased individuals and barbarous societies, as also in an immense class of natures not the lowest.

The supernatural has been associated with the development of that high morality for which all parties contend. The distance is vast indeed from the archaic morality of primitive societies to the comprehensive and delicate morality of our day. It is very generally believed that the colour-sense has developed in mankind, and that the optic sensibility is far more acute and differentiating in us than in our ancestors; the chromatic scale has become richer and more exact. This is true in regard to the moral sense. There is amongst us a keener perception of justice, truth, purity, and mercy, than, perhaps, ever existed before in the multitude; the moral sense has been touched to finest issues. There is also a conviction of the imperativeness and essentiality of high thinking and living, quite peculiar to our era. Is it not a striking fact that in this

^{*} Rousseau, Vol. II. p. 198.

controversy concerning the worth of life, all parties agree that the question is one of morality—that high living is the only living worth considering? If this question had been mooted in Greece or Rome it would never have been discussed on such grounds. It might have been disputed on grounds of knowledge, or pleasure, or patriotism; the disputants would have rung the changes on power, riches, glory, festivity, fame; but that the worth of life is bound up with a high morality, is an idea far above, out of sight of the host of Greek sophists or Roman scholars. Whence comes this clearer vision of the higher law? Whence comes this solemn sense of the grandeur and obligation of this law? Whence comes this enthusiasm of morality? It is undeniable that religion has been the antecedent and concomitant of the whole process.

As yet we have no practical evidence that this high morality can exist independently of faith. We have just been told that the late Professor Clifford lived honourably and died courageously after having rejected the creeds, and this proves the superfluousness of the creeds. It falls far short of proving anything of the kind. Mr. Mallock has shown in a fine illustration how the religious element pervades our institutions, laws, literature, and how impossible it is to eliminate it. This is palpably just; we can no more subtract the influences of religion from the world about us than we can take the sunshine of past years out of the forest trees; and our unbelievers are, every day, unconsciously working with those spiritual forces whose existence they deny. Professor Clifford, and such as he, owe very much of their nobler self to the religion which pervades the world about them. There is another consideration not to be lost sight of, and one, perhaps, more important still, viz., the religion that is in us. The doctrine of inheritance is an approved doctrine of modern science, and it contains a truth not to be overlooked in reference to the point under consideration. We must claim that the doctrine of inheritance covers the entire ground; our moral predispositions and habits of thought, as well as our physical features and mental characteristics, are matters of transmission. The courage, the sympathy, the veracity. the magnanimity, the justice, the cheerfulness, the hopefulness, we find in ourselves; has not the law of inheritance been at work here? has not the sceptic inherited these supreme treasures? And from whom has he

inherited them? According to the analogy of science, centuries of religious culture have eventuated in the moral tone of a modern Englishman. Our truthfulness, courage, hopefulness, disinterestedness, purity, are, in a sense, constitutional, and religion through long ages has presided over the fashioning of that constitution. Ages of consolation and hope have dyed our temperament in a brightness. the blackness of atheism cannot immediately quench; long listening to the grand story of Heaven's redeeming love, our heart has acquired a breadth and pathos not to be renounced in a decade; the presence of the great Example has impressed on our character lines of beauty which will long linger, despite decay's effacing fingers; and that instinct for truth and righteousness which we have acquired through familiarity with the laws of God through fifty generations, will hardly be starved in a lifetime. We may adopt the most uncompromising atheism; but we cannot free ourselves from the religious element which pervades the whole world about us, and which exists most actively in our temperaments, dispositions, and habits of thought. The assertion about Clifford would have some weight if he had followed ten generations of unbelievers, and lived in a world thoroughly adjusted to an atheist's As it is his life proves nothing to the point. Semler, in 1787, sent to the Academy of Berlin his discovery that gold grew in a certain salt; the salt was examined. and gold leaf found in it—which his servants had put there unknown to the philosopher; and studying the nobler features of Clifford's life we feel sure that these are not the creation of his atheistic alchemy, but the precious remainders of that grander faith which he, in an evil hour, rejected.

Miss Bevington, in attempting to prove the efficacy of Positive aspirations, argues thus: "To go no further, certain present social movements, instituted largely by disbelievers in personal immortality, and with no hope of large result in their own generation, indicate that, as a simple matter of fact, such prospective altruistic hope is profoundly inspiring to an increasing minority. This is an indisputable and stubborn fact." This is a short and easy way with the theists. But what are the social movements of any peculiar merit instituted by disbelievers? We do not know of any such movements. With their criticisms on the work of the Church we are very familiar; with their startling speculations, their eloquent discussions of

moral and social questions, their rapturous prophesyings, their "great thoughts of heart"—it is impossible for us to be unacquainted; but of great movements inaugurated by them for the amelioration of the world, we are totally ignorant. Positivism boasts of having transcended religion in theory; but, as yet, has done nothing in the fields of practical philanthropy. That a few atheists may be doing good we are not careful to deny; this phenomenon, too, may be explained on other grounds than atheistic altruism: but that any considerable movement in practical charity has been carried out in atheistic circles we have yet to No such evidence as that the highest forms of character and action can be sustained without the supernatural is forthcoming, or, in the nature of the case, can be forthcoming at present; a very considerable period must elapse, and mighty revolutions in thought and life take place, before the validity of atheistic morality can be empirically demonstrated. It makes all the difference in the world to a plant whether it touches the earth by the finest thread, or is severed completely from the soil; and the faintest thread of connection with the truth and life of godliness. gives to infidel ethics and action a glow and force which it is impossible to estimate. Many such threads to-day unite the infidel world with the vitalities of supernaturalism.

Religion has attended the genesis of the higher ethics and their development, and we have no practical data to prove that ethics can flourish apart from faith. The question, therefore, of the essential interdependence of religion and morality is about as manifest as the essential interdependence of the earth and sun; and to persuade us to divorce manners from faith is as if some enthusiastic dreamer should seek to convince us that this planet would do very well without the sun. It is true, he might argue, that the two have gone together since the earth was in any wise a habitable sphere; this, however, does not prove their inseparableness. That the pleasures of sight are dependent upon solar light is a mere superstition, for have not creatures been brought up from the dark depths of the Atlantic with eyes unusually developed and apparently of great delicacy? and does not Sir W. Thomson suggest the possibility that as the sun's light diminishes the power of vision may become more acute, until at length the eve may become susceptible of the stimulus of the fainter light of phosphorescence? Our dreamer might go on to add,

that the orb was not necessary for purposes of illumination, since the electric lamp has made night "as light as day;" that it was not necessary for the glory of the summer landscape, as we see some flowers become beautifully coloured in the dark; and as to the warmth and fruitfulness of the globe, surely we can trust ourselves to central warmths! So he might conclude by promising us,—that whilst we might miss for awhile the pleasing splendours of sunrise and sunset, the barren hues of clouds and rainbows,—all the solid things would remain, and we might confidently anticipate that the terrestrial would hold its own. Nevertheless should we witness the departure of the great luminary with deep misgivings, and feel that with his faded brightness faded the glory of the world.

Mr. Mallock shows that the denial of the supernatural is the sunset of the moral world; that when the supernatural element has gone life has lost its sacredness and blessedness; and herein the great merit of this work consists. Mr. Mallock is very happy in showing the perplexity of Positive writers in reference to the chief good: how impossible it is for them to define the aim of human life. They use a multitude of fine phrases, but never once tell us what is the good or happiness at which we are to aim. The chapter on "Sociology as the Foundation of Morality" is both acute and valuable. A positivist is so far like a suspicious character that he ever seeks to lose himself in a crowd; and so here, unable to define personal happiness, he directs us to live for the public happiness. Mr. Mallock rightly insists that "it is in terms of the individual, and of the individual only, that the value of life can at first be intelligibly stated." The first result of the absence of the supernatural is that we are left without any definite and noble ideal in life.

It is frequently contended that we find a value in life in simply living—in our physical sensations, in the presence of the beautiful world, and in the associations and relationships of daily life. Mr. Mallock admonishes us that our enjoyment of the world about us is largely conditioned by the moods of the soul, and if these moods become lower or darker our joy in all things is correspondingly destroyed. Faith in God, and in a higher world, gives that elevation and refinement of soul which is essential to the full enjoyment of terrestrial scenes.

Then it is maintained that devotion to truth gives sacredness to life. Mr. Mallock shows that devotion to truth has no meaning after the higher universe is denied. There is nothing sacred in nature, according to the showing of the positivists, and there can be nothing very noble or very happy in discovering and proclaiming disagreeable truths. Devotion to truth has a meaning to those who believe in the will of the wise, just, and holy God, but none to those who believe only in the order or disorder of the universe.

Then it is said that goodness is its own reward, and to live nobly is to discover the secret of life. This is a very vital position, we allow. An artist named Brendal, fond of alchymy, having proposed to Rubens to join him in the discovery of its mysteries, he replied: "You are too late in your application: for these twenty years past my pencils and pallet have revealed to me the secret about which you are so solicitous." Even so the value of life will not be made manifest by cunning reasonings or deep speculations: we all find the secret of life in noble living, as Rubens found the secret of alchymy in noble work. But, as Mr. Mallock shows, noble living loses its reasonableness and inspiration when placed on a purely secular basis. The inwardness, the importance, and the absolute character of goodness are surrendered by the secular moralist.

Finally, it is contended that in love we find the preciousness of life. Mr. Mallock shows that there are two kinds of love: one kind most noble and holy, the other most abominable; and that when the supernatural moral judgment is denied we are just as free to one kind of love as The kind of love is everything, and the selecthe other. tion of this kind can be neither made nor justified on positive principles. That love would soon deteriorate, as Mr. Mallock suggests, is very probable if we remember the place assigned to it in sceptical science and philosophy. As to the origin of love, Haeckel says: "The critical naturalist very prosaically conceives the 'crown of love.'" And he says truly, for he adds: "Notwithstanding all this (the poetry and romance of love) the comparative history of evolution leads us back very clearly and indubitably to the oldest and simplest source of love—the elective affinity of two differing cells." Schopenhauer holds the

^{*} Brolution of Man, Vol. IL. p. 294.

same prosaic views, and refers the most ideal of passions to a simply utilitarian end. "The aim of Nature merely regards the perpetuation of the species; the individual is as nothing to her. . . . The poetry of love is mainly illusion and glittering drapery, designed to mantle the stern solemnity of the thing as it really is. . . . All love, however ethereally it comports itself, is rooted solely in desire; indeed, is really but a certain, specified, individual sexual inclination." Now how long are George Eliot's fine pictures of love to pass current after love has been placed on an animal basis, and this prosaic

philosophy comes to the aid of passion?

"Moral goodness is a transcendental quality, and belongs to an order of things which reaches above this life;" and, in rejecting everything above this life, our secularists have reduced moral goodness to a merely poetic phrase. We are often reminded of the saying of Kant: "Two things fill me with awe—the starry heavens and the sense of moral responsibility in man." But where are the heavens and the conscience now in modern thought? Speaking of the "boundless firmament" and its orbs, J. S. Mill writes: "Though the vast scale of these phenomena may well excite wonder, the feeling it inspires is of a totally different character from admiration of excellence. Those in whom awe produces admiration may be sesthetically developed, but they are morally uncultivated." † If the witches have not stolen the holy stars and left all dark the philosophers have. Then as to the sense of moral responsibility, all the mystery and grandeur of that sense has clean gone since the ethical faculty has been reckoned as the aggregate of the experiences of pleasure and pain in our ancestors, and nothing more. Many of our atheists and materialists still cling to the reality of virtue, and call life sacred, and noble, and what not; but the more thoroughgoing sceptics of the Continent go all the way with their principles, and utterly discard all fine phrases. They see that with the supernatural the mystic glory of life has departed: they refuse any longer to put grand names on mean things. There is no higher law for us to keep, and which gives a sacredness to life. Life has no grand rule, no grand aim: there is nothing for us but discontent and hopelessness. Schopenhauer's own life of

† Essays on Religion.

^{*} Miss Zimmern, Life of Schopenhauer, p. 222.

atheistic persuasion, despairing philosophy, and epicurean living is the logical deduction from the positive creed, and the latest illustration of the Apostle's rendering of unbelief: "Let us eat and drink, for to-morrow we die."

Pessimism has also rightly estimated the theory of living for society and for the future of our race. Although no definition of social happiness has been given, we are instructed to find the charm of life in living for society. This will not do, however, for men who have more reason than imagination. Schopenhauer held the identity of all beings as different manifestations of one common will or substance, and insisted that the individual self is a de-"Individuality, whether of the organic body or of the conscious self, is simply a phenomenon, an appearance vanishing with death." To use their own figure, man is a mere rainbow. Now, at bottom, the doctrine of Schopenhauer is really the doctrine of positivism—the nothingness of the individual. In the positivist scheme you are to heighten the self-respect of the race by diminishing your own self-respect; you are to be on your watch against religious theories "which make humanity over-abound in self-consequence, and fill individuals with the strutting importance of creatures with private souls to save or lose. But if the individual is nothing, what is society? In the arithmetic of positivism the person is nothing, but a million of such nothings make a something, and a few billions make a divinity. A rainbow is nothing in the world, but put together all the rainbows which have shone since Noah, and you have a Deity shining in all the beauty of holiness, and you have something to live for. Pessimism, on the other hand, despises the race as it despises the individual, and herein is consistent.

The past which our science holds up before us is dark enough to justify any pessimism. It is truly awful to think of the races of the past in the light of modern science. History is a record of fearful struggles, and prehistoric times, we are assured, were fiercer still. This is Mr. Sully's reflection on the tremendous story: "If, on the whole, the extinct generations of men have, along with their dumb companions, lived and laboured only to reap a dreary surplusage of suffering, their death-calmed features betray no after sense of their woeful experience. The story is told and cannot now be altered. On the other hand, the absolute value of the future is a matter of

supreme moment for our practical instincts. The lives that have to be lived are still a reality, and even to us of the passing hour they seem from afar to send faint cries for apostolic help. It is enough that, if we peer into the darkness of the world to be, we can faintly descry the form of a good which triumphs over evil, and triumphs more and more." A cool way of dismissing our bleeding fathers: a scrap of miserable sentimentalism to conceal a terrible difficulty. The absolute value of the past is a matter of supreme moment for our judicial instinct; the lives that have been lived are still a reality; and even to us of the passing hour those who have lived send more than faint cries for some sort of justice and compensation. We utterly refuse to dismiss the myriads of our suffering ancestors with such supercilious rhetoric. We utterly refuse to forget the tragedies of ages in the anticipation of some distant and dubious triumph. We utterly refuse to rejoice in the golden age which may or may not come, until justice in some shape has been done to the dark ages behind us. "It is enough." It is not enough. The blood of past generations cries out from the earth, and we will not stop our ears to the wail. It is not meet that we should be glad until such sorrows are reconciled with righteousness, and we have seen in the cosmic scheme some hope of compensation for the sufferers. Pessimism looks back, and marking the unavenged wrongs, the unspeakable pangs, the measureless agony which have marked the red path of the race to this hour, loses all heart and refuses to be comforted: and such an attitude is more to be admired than the gushing optimism which forgets the horrors of history in the dreams of unaccredited prophecy. We ought not to enjoy ourselves, and if the men of the future are as noble as predicted, they will take their pleasures sadly in their great palace of skulls. "The music of the future" is of a sad type, and that may well be the case, seeing the gladness of the coming race will re-semble the unblessed melody of the witches whose flutes are dead men's bones.

The law represented as the source of progress is cruel enough. The theory of evolution is truly distressing. "A constant stream of thwarted and crushed lives is a concomitant of the whole process." All thinking men are

^{*} Pessimism, p. 397.

conscious that this theory has cast a deep gloom over life. All being and progress spring out of struggle and blood: for one survival, you have a host of exterminations; the weak, not the worst, go to the wall; the strong, not the best, survive; the strong and victorious are such by accident only. It is with pensive thought that we witness the mass of blossom perish from the tree that some few blooms may set and fruit. This is, however, but a faint and feeble image of what, on this theory, is going on throughout the world of living creatures; for in those shed blossoms is no dream of the summer, no sense of golden sunshine or cooling dew, whilst living creatures are torn from all the dreams and aspirations of sentient life, and drop with infinite sadness into the dust. Some of our philosophers having accepted this doctrine of the universe, seek to soften down the awful law by a variety of sentimental reflections—once more producing their cake in poetry after having eaten it in science—but others, having accepted the doctrine, realise honestly its stark terror, and mourn the curse of existence. J. S. Mill is struck with "the perfect and absolute recklessness of the cosmic forces. . . . They go straight to their end, without regarding what or whom they crush on the road." perishing multitude may well groan whilst they are being crushed under the wheels in the midst of which is no spirit, and in the rings of which are no eyes; and the fortunate who are lifted up for a moment have no cause for exultation, as the next revolution of the wheel dooms them to suffering and annihilation.

The prospect before us is also anything but reassuring on positive grounds. Now it is here certainly that the secularists put forth all their strength. Nature is against them; history is against them; but they are strong in prophecy. The Book of the Revelation occupies a large space in the bible of positivism. In the mighty Pilgrim's Progress of Humanity we have left far behind us the original City of Doom, the geological chaos; passed the Sloughs of Despond of cave-life; fought the devils in the Valley of the Shadow of Death of mediæval epochs; and now we stand on Beulah, and scenes surpassing fable greet

the glowing eyes of the secularistic watcher.

"For birth, and life, and death, and that strange state Before the naked soul has found its home, All tend to perfect happiness, and urge The restless wheels of being on their way, Whose flashing spokes, instinct with infinite life, Bicker and burn to gain their destined goal."

"The world as a process of evolution tends to a rational end." "There is a tendency in the movements of events to some worthy result." Now, if this prospect were assured it would not reconcile us to the bitter and uncompensated sorrows under which we faint to-day. It is folly to talk of loving our unborn descendants more than we love ourselves and about being ready to suffer martyrdom on their behalf. Rousseau wrote to some gushing correspondent: "You say you love me better than you love yourself; you lie." The expression was not polite, but it was true; and Rousseau's answer is the best answer to the positive sentimentalism about loving unborn generations with such self-immolating affection. But this prospect is not assured. Our sceptics have laughed teleology to scorn, and then seek comfort in maintaining that there is a plan in history, and that the world tends to a rational end! Let us once more listen to the atheistic spokesman who blurts out the truth as it is in unbelief:

"The favourite phrase, 'the moral ordering of the world,' is also shown in its true light by these dysteleological facts. Thus viewed, the 'moral ordering of the world' is evidently a beautiful poem which is proved to be false by the actual facts. None but the idealist scholar, who closes his eyes to the real truth, or the priest, who tries to keep his spiritual flock in ecclesiastical leading-strings, can any longer tell the fable of 'the moral ordering of the world.' It exists neither in nature nor in human life, neither in natural history nor in the history of civilisation. The terrible and ceaseless 'struggle for existence' gives the real impulse to the blind course of the world. A 'moral ordering,' and a 'purposive plan' of the world can only be visible, if the prevalence of an immoral rule of the strongest and undesigned organisation is entirely ignored."—Evolution of Man, Vol. I. p. 3.

It is repulsive, yet still it is satisfactory for many reasons to witness this brutal trailing of the corpse through the modern high festival of knowledge, where savants are so apt to gloze over the horrible aspects of their philosophy with poetic phrases and illusions of rhetoric. The doctrine of Purposelessness is the all-comprehensive doctrine of modern sceptical philosophy; where, then, is the logical justification of radiant prophecies for the future of our race?

The pessimist refuses to believe that this blind archer will hit the gold; that this blind guide will conduct us anywhere except into the ditch: and refuses to believe with reason on his side. He can see that with the increase of knowledge and sensibility there will, most probably, be an increase of misery, and he anticipates, with Humboldt, that

our posterity will be more unhappy than we are.

This century commenced with high anticipations for mankind; Condorcet, Godwin and others taught with enthusiasm the doctrine of the perfectibility of the human All social and political evils were to be removed, and peace, virtue, and happiness were to be established throughout the whole earth. During the century the most extraordinary progress has been made in science, wealth, knowledge, taste, discovery, as also in social and political arrangements; and now, as the century wears to its close, we have educated men by the score writing the bitterest things against life, and throughout Christendom spreads the spirit of a fierce discontent. Several works have lately appeared in Germany on the "Philosophy of Redemption." These books particularly consider the duty and the means of effecting what they call "the salvation of the world" that is, of redeeming the universe from the burden of its miserable existence. Some of these pessimists counsel suicide; others exhort to celibacy; whilst others recommend as the best course the rapid multiplication of the population; for in proportion as the race becomes more numerous, the struggle for existence will be fiercer and more desperate, the misery so produced will be greater, and the combatants will be the sooner reconciled to the idea of giving up the fruitless contest altogether, and sinking back into the comparatively blissful repose of nothingness.* The godless doctrine which has prevailed during this century has left the irreligious world profoundly dissatisfied with its increased intellectual, political, and material treasures, and the race is called upon to consider not its apotheosis, but its suicide.

Pessimism finds its justification finally in the rejection of the hope of immortality. The more poetical atheist maintains that the rejection of this hope does not necessarily mar the pleasure of our fugitive existence, but the colder unbeliever is conscious how much we lose with the loss of a personal

^{*} See article on Malthusianism, North American Review, Nov. 1879.

future. There is a great truth in Schopenhauer's doctrine of the infinite and restless striving of will, of the profound and endless striving of which we are conscious. It is only a grotesque restatement of the sentiment of infinity which is inseparable from human nature. Schopenhauer declares the hope of immortality to be an illusion of the childhood of the race, and then, turning an introspective glance, finds the clear intimation of that immortality in the infinite and eternal outgoing of the soul; he plucks the bright flower of hope from the creed, and then finds the root of it still in the heart, to his infinite perplexity. The German pessimist is much nearer the truth with his doctrine of the blind, hungry, endless striving of the soul, than are those English moralists whose great business has been of late to insist on the immorality of immoderate desire. They simply aim to destroy those mighty aspirations of the soul which Schopenhauer felt he could not deny. We have no space left to argue this question, but we reaffirm the doctrine of the Church, that it is only in the recognition of the infinity of human nature, and in the direction of the quenchless aspiration to the only worthy Object, that we find satisfaction:

"For from the birth
Of mortal man, the sovereign Maker said,
That not in humble nor in brief delight,
Not in the fading echoes of renown,
Power's purple robes, nor pleasure's flowery cup,
The soul should find enjoyment: But from these
Turning disdainful to an equal good,
Through all the ascent of things enlarge her view,
Till every bound at length should disappear,
And infinite perfection close the scene."

In taking from us the sense of infinity and eternity, our sceptics take from us the spell of existence, and leave us tormented by blind and irrepressible impulses which we can neither explain nor satisfy. Surely if there is no hope of future compensations and felicities, we are, as Schopenhauer maintains we are, of all beings most miserable. We are instructed for our humbling that we came from the worms—the lowest worms; and so, when the whirligig of time brings its revenge, and the worm and the empty skull meet in the dust, the worm may well laugh at the grinning failure which took so long and sad a journey for such a

result. The special pleadings of atheism cannot any longer conceal from thinking men the horror of the hopeless grave.

As Professor Flint maintains, the pessimist view of existence can only be met by a religious view of existence; and the rapid spread of despairing views of life may sooner show the need and preciousness of revelation. The world is finding out that if it will not live for God. there is nothing else to live for; that if it will not hope for heaven, there is nothing else to hope for. The generation is being made to feel the sentence of death in itself. and we may hope that as men more vividly realise their wretchedness without God, it may hasten their return to His arms. We read of a young French artist who attempted to explore one of the catacombs with nothing but a torch and a thread for a guide. As he wandered on through gallery and chamber, he became so absorbed in his study that, unawares, the thread slipped from his hand. On discovering his loss he tried, but in vain, to recover the clue. Presently his torch went out, and he was left in utter darkness, imprisoned in a living grave, surrounded by the relies of mortality. The silence was oppressive. He shouted, but the hollow echoes mocked his voice. Weary with fruitless efforts to escape his drear imprisonment, he threw himself in despair upon the earth, when, lo. something familiar touched his hand. It was the long-lost clue by which alone he could obtain deliverance from the awful labyrinth, and, following it, to his great delight he reached the open air. Many now have lost the clue to the higher world and its grand realities, and it may be that only when their last torch has gone out in horrible darkness, and they find themselves imprisoned in a living grave amid dead men's bones, will they sink to the earth in despair, and regain the precious thread of truth which leads to the upper air and the everlasting sunshine.

Of Mr. Mallock's chapter on the "Universal History and Claims of the Christian Church," we will only say that it is much to be regretted that he should have marred his discussion of the general question by the insertion of

such a weak piece of reasoning.

ART. VIII.—La Bible au Seizième Siècle. Etude sur les Origines de la Critique Biblique. Par SAMUEL BERGER. Paris: Berger, Levrailt and Co. 1879.

Nothing, generally speaking, can be more interesting than an Etude or Study of any special subject in the hands of a competent French writer. The value of the result of course depends on internal considerations : it may be, and often is, slight and ephemeral; it may also be permanently useful and influential. M. Berger has long proved his competence, and this Study will be found by the reader of French theology deeply interesting and not a little profitable. We shall give some account of it, and, as always, in the case of untranslated works, let the author speak rather than ourselves: premising that this paper will necessarily be almost

entirely historical.

The preliminary of an inquiry into the place vindicated for the Bible at the Reformation, is the consideration of what it was in the last part of the Middle Ages. The history of exegesis during that period has yet to be written. Materials enough have been contributed, but they have never yet been arranged. Nor has M. Berger attempted it himself; but he has given us a few very suggestive facts as to the relation of the clergy and the mendicant orders to the Scriptures. The reader will find a very suggestive introduction on this subject. For instance, he will learn how scarce a thing the Bible itself was. It is not generally known how difficult it was in those days to become possessed of a copy of the written Word of God. Much valuable information is here condensed on this subject, of which we give merely a few specimens. In the thirteenth century its price was estimated in France at from fourteen to twenty pounds of our present money; and some fine copies, the name of which was generally "the Bibliotheca," or Library, reached much higher prices even than this. When a priest wanted to borrow a Bible from the library of a convent, he was required to deposit pledges of high value. In 1284, the rector of a village in the diocese of Evreux engages "all his possessions, present and future, ecclesiastical and secular." for a Bible which he borrowed

from the Augustines, estimated at £50. On the other hand, the Bible itself was often left as a pledge. In 1457, the University of Caen borrows a sum of £30 from the Faculty of Arts, and lays down the Bible, four volumes of St. Augustine, and the Catholicon. Gratuitous lending, however, of the Bible was largely practised in the convents. The Council of Paris, in 1212, reminded the religious that lending was a work of mercy, and that the monks ought to lend books, cum indemnitate domus, to poor scholars. The convent of St. Victor, and many others, received gifts and legacies of Bibles for the use of poor elerics, one of them having stamped upon it Nota pauperibus. The rule of the Dominicans, De studentibus, ordered that every province should provide for students three books at least—the Bible, Biblical History, and the Sentences.

The reader will find here a curious account of the apparatus provided in these ages for the student of the Scriptures. The Fathers of the Church were no longer much read. Certain extracts from these works were gathered together and published as postils. But there were Dictionaries of the Bible current in those days, remarkable precursors of our rich literature. The following account of

one of them may be given in full as a specimen:

"A book composed for the use of the schools and convents, and especially for country curates, embraces all the Biblical literature of the time, under the fanciful name of Marmotret (Mammotrectus). Its author was Marchisino, a minorite of Reggio, who wrote in 1300. This is his modest preface: 'Impatient of my own ignorance, and feeling for the inexperience of the poor clergy who have to preach, I have resolved to go rapidly through the Bible, and, if life is spared, to examine attentively the books which are most used in the Church. I will point out to the poor reader the meaning of the difficult words, their accent, and their character. I will gather, according to the measure of my ability, what I can find in the works of others: thus the etymology will establish the sense, and the prosody will charm the ears. I will pour out the fruit of my researches, like the ointment of the Magdalene, on the feet of my Master; and, since my book must have the place of a preceptor who directs the steps of infancy, it shall be called the Nurse, Mammotrectus.' This name he got from Augustine's Commentary on the 30th Psalm. His name was so well concealed that he was generally known

as the frater mammotrectus. Sixtus of Siena says: 'Like the poor widow who gave the two mites, this brother brought to the Lord's temple-treasury, in the poverty of his spirit, all that he had.' The Bible and the Breviary, explained word by word in the Mammotrectus, provided for the poor reader quite a library in one volume. The explanation of the celebrated Prologues of Jerome, taken literally from an earlier author, elementary notions on the early translations of the Bible and on some Old-Testament histories, treatises on orthography and accentuation, and some views of the four senses in Scripture, complete this little encyclopædia of the village priest and the Franciscan monk. It was printed in thirty-four editions; was the first production of the Swiss press; it was still printed at the end of the sixteenth century; and we have seen an Italian dictionary of 1625, which is little more than an

alphabetical summary of the Mammotrectus."

This poor book was very serviceable in its day, and scarcely deserved the keen ridicule with which the Humanists, and Luther himself, assailed it at the Reformation. For other works of the same nature, which were the precursors of our modern Biblical dictionaries and hand-books, we must refer to our author himself. Passing over the interminable and incomprehensible rules of interpretation taught in these helps, we fasten upon a passage which dwells on the authority conceded in those days to the Bible. Without defining inspiration, the authorities of the medieval church had no doubt that the Bible was inspired. An interesting controversy began the Middle Ages between Agobard and Fredegisus, abbé in Tours. The latter asserted that inspiration extended to the words: "The Holy Ghost not only inspired the thoughts, the arguments, and the manner of presenting them, but put the words also into their mouths." Agobard replied that this was to say that the Holy Ghost made the prophets speak as the angel made Balaam's ass speak. This controversy died out, and was not renewed. "At the time we now speak of such phenomena as Agobard's outburst have no longer a place in theology. The theory of the quadruple sense permitted the sacred text to be understood in any desired way without great efforts. We see, on the contrary, many authors representing God as the author of their own books, using the same terms as those in which they attribute to Him the holy writings." The

idea, universal in the Middle Ages, that the Church had the authority of God Himself, tended to place on the same bases of respect and belief a great number of books, decrees, and canons of councils; "so that it may be said (and without this remark we cannot possibly understand the Reformers' point of view and their liberty as in respect to the Bible), that in the Middle Ages the idea of the Canon no longer existed."

M. Berger then discusses the texts of the Church's law on this subject. The code universally admitted was the decree of Gratian, meriting in this respect its title of Concordia discordantium Canonum, as it placed in juxtaposition most contradictory decrees. On the one hand it seems to establish the exclusive authority of Holy Scripture. The texts which Gratian cites before all others are the celebrated passages of St. Augustine on Scripture and the doctors. particularly his epistles to St. Jerome. "I have learned to accord to the writings only which we call canonical such a degree of respect and honour that it is impossible for me to believe that their authors fell when they wrote into any error. . . . When I read the other authors, whatever may be the authority of their sanctity or their learning, I do not believe them because they have spoken, but because they prove to me, by the testimony of the canonical authors or by probable reasons, the truth they teach." Augustine's words are vel per illos auctores canonicos, vel probabili ratione. The text of Gratian is unintelligible, per alios auctores, vel canonicos vel probabiles rationes; though we find this in Luther's lips, and it became one of the cries of the Reformation. When, on the contrary, Gratian is treating, not of Scripture but of tradition, he lays down propositions directly contrary to these. He borrows from St. Basil a passage which has played an important part in the history of the canonisation of ecclesiastical traditions: "Of the institutions of the Church some we receive from Scripture; others have come to us from apostolical authority, and have been confirmed by those who were the apostles' successors in their ministry; some have received them free from custom and the authority of usage; to the one and to the other there is due an equal reverence and an equal piety." It is impossible to translate exactly the solecisms and the contradictions of the text which Gratian has made the law of the Church. Basil said nothing like what has just been

said, and the Roman correctors, who retouched in 1582 the text of the decree, restored the passage as it here follows: "The one and the other have the same power to excite piety." But before the correctors had caused the error to disappear from the texts, the fathers of the Council of Trent had appropriated the wrong version of Gratian. The passage of Basil, as it had been copied by an unscrupulous monk, still serves, by the authority of a general council, to express the Church's reverence for traditions: pari pietatis affectu et reverentia. Gratian, or his copyist, had, without doubt, under his eye a manuscript which said: par virtus, utrisque, et effectus. An error of a copy has become the law of the Church. In another passage Gratian lays down the principle that "the decretal epistles are placed in the rank of the canonical writings;" and this he advances on the credit of a passage in St. Augustine, which, however, is so evidently wrested from its meaning that the correctors themselves observed that it did not apply to this point. Finally, Gratian declares that "the decretal epistles are elevated to the same rank of authority as the canons of councils." Such, in the laws of the Church, are the disagreement and contradiction of the texts.

As to the liberty of interpretation, that was confined within narrow and yet most indeterminate limits. The rule of the Augustines says: "The master of Scripture must not advance anything in the interpretation of the holy books which does not agree with the teaching of the sainted doctors of the Church, or which appears to depart from the decrees of the holy Roman Church, and of the holy councils approved by her." Gerson, in his Propositions on the literal sense of Holy Scripture, said expressly: "The literal meaning of the word ought to be estimated according to the sense put on it by the Church, inspired by the Holy Spirit, and not according to the individual will and interpretation of particular men." It can hardly be matter of wonder that the authority of the Bible became so uncertain, and its interpretation so arbitrary, that it was matter of common complaint, even among zealous preachers in the several orders holding to the Church. Thus Geiler, of Kayserberg, one of the most illustrious preachers of the latter part of the mediaval age, mourned in words which were scarcely meant for irony: "Holy Scripture is like a nose of wax, which every man may twist according to his own fancy."

We cannot touch upon the brief history of the first French translations of the Bible into the French: but pass to the more important scene in which Erasmus and Luther, with their coadjutors, play their conspicuous part. Erasmus is the Hesperus of the modern host. following words are a translation of some of the stirring sayings with which he began the campaign, taken from his Enchiridion Militis Christiani: "Paul would have us to be always armed with prayer and knowledge; he tells us to pray without ceasing. Here you see the difference between human and Divine letters; for all Holy Scripture is divinely inspired, and proceeds from God as its author. That which is least in it tends to show the humility of the word, which encloses great mysteries as it were under contemptible phrases. Since faith is the only door that lets in to Christ, it is a rule of the first importance that you think rightly of Him and of the Scriptures delivered from Him by His spirit. And you must believe them, not only with the lips, as boldly, fearfully, and doubtingly as common Christians do, but, with the whole heart, letting the word dwell rootedly within you, holding firmly that not a single jot is in it which does not mightily concern your salvation."

But it is in the Methodus perveniendi ad veram Theologiam, dated 1518, that we find the fullest thoughts of Erasmus on the Word of God. "Let it be your first care." is the pith of what he says, "to acquire perfectly the three tongues, Latin, Greek and Hebrew. Do not listen to those men, grown grey in sophistry, who keep crying, 'the translation of St. Jerome is enough for me;' this is what men say who know no Latin and who vainly turn over the pages of St. Jerome. It is certainly not a matter of indifference whether we go to the sources themselves or to impure waters of the marsh. The sacred manuscripts were very early disfigured by the error of copyists. And Jerome was no exception: he also might often err." In the original Scriptures themselves Erasmus was disposed. following Augustine and followed by Luther, to find certain different degrees of authority, ordinem auctoritatis aliquem. And once on this track, the spirit of criticism, or rather scepticism, went on step by step, and gave such encouragement to latitudinarianism as went far to neutralise the benefit of his early protest. The first notes of this freedom do not fall unpleasantly or very suspiciously on the ear.

Thus: "Isaiah has more weight to me than Judith or Esther, the gospel of Matthew has more authority than the apocalypse attributed to St. John, and the epistles of Paul to the Romans and Corinthians more than the epistle to Nevertheless, the variety in which the the Hebrews. Christ is pleased to appear does not disturb the harmony of the holy book; rather, as the diversity of voices make the charm of a choir, so the variety of the Christ makes the Scriptures an admirable concert. He makes Himself everything to all kinds of men, and nevertheless never differs from Himself. Sometimes He gives evidence of His Divinity; sometimes veiling His Divine nature, He shows Himself man to our eyes. Occasionally He seems to contradict Himself; and, in certain narratives, the discrepancies in detail are very manifest." Erasmus had at the outset what he thought a sufficient guard for himself and for those whom he exhorts. "The way to triumph over all difficulties is to explain the obscure passages by comparison with the plainer ones." Above all, he urged the theologians and preachers of his day to go back to the Scriptures themselves, forsaking all such human guides as were then current, "and make your heart the Bibliotheca of Christ."

Erasmus became, however, a somewhat more venturesome critic, and his views were more pronounced. His notes, accompanying the Greek Testament, are generally referred to as containing the germs of much wilder license; but we find nothing that betrays a really bold critic. never held a fixed opinion to the end; and some of his worst suggestions may be made harmless, even in the light of the strictest views. "The authority of Scripture," he says, "will not be shaken if the writers are seen to vary in words or in thoughts, provided they firmly establish the general fund of facts concerned, on which our salvation depends. As the Divine Spirit who directs the thoughts of the apostles has permitted those whom He inspired to be ignorant of certain things, or that sometimes they should fall into some error of judgment or opinion, yet without inflicting any hurt on the gospel they preach, their very errors therefore serve to confirm our faith. Perhaps the Spirit directed the memory of the apostles in such a way that what escaped them in their human infirmity has not diminished the faith due to Holy Scripture, but has even augmented it. Christ alone is called the Truth: He alone

escaped all error." Those who are in the habit of pointing to the example of the precursors and fathers of the Reformation in defence of their own license, and pleading Erasmus and Luther and Calvin as patrons of their own free handling of Scripture, should weigh well the guards and defences they threw around their admissions. For the rest, the judgment of Erasmus has little weight as a final authority in any point whether of criticism or of exegesis. He was dexterous and timid and ambiguous: often hinting what he did not venture to express boldly, and throwing such a veil around his words as would sometimes entirely disguise their real character. One or two instances may

be given.

The Faculty of Paris in 1527 censured the opinions of Erasmus on the Epistle to the Hebrews as arrogant and schismatical. "While the whole Church," said the Sorbonne, "proclaims that the epistle was written by Paul, this author still doubts." Erasmus skilfully replies that the title was employed by the councils only to indicate the document. He shows that the same doctors who, when it suited their purpose, affirmed that it was of St. Paul, show in other passages that they doubt the authorship: Origen, Jerome, Augustine in particular. If the council of Nices, and the other synods, were authoritative on the conscience. why have these doctors dared to doubt about the author of this epistle? "Of the author, I say, and not of the authority," for they evidently cared little about the title provided the authority were established. There is no end of discussion, he says, if we ask the true value of usage: moreover, the usage in this matter is not universal. And so he goes on; but we cannot tell what his own judgments really were.

Similarly as the Epistle of St. James. Here we quote the very words of Erasmus. "This epistle is full of the most salutary precepts; nevertheless the authorship has always been doubted. It does not, after all, seem to breathe apostolic majesty and gravity. It has not the Hebraisms which one might expect from James, the Bishop of Jerusalem. But I quarrel with no one about this. I accept the epistle, and I embrace it. But what I much wonder at is that the people who maintain these opinions with most obstinacy and violence are precisely those who are incapable of saying in what language it was written, in Hebrew or in Greek, and what translator turned it into

Latin. Jerome was a great man; he doubted, and has not expressed his opinion save with great reserve. As to us,

the less we know the more boldly we affirm."

His dealing with the Apocalypse gives a striking illustration of the tendency the new movement was beginning "I have finished," he writes to a friend, "in the midst of many labours, the paraphrase of the entire New Testament, excepting the Apocalypse, which tolerates no paraphrase and scarcely translation. Nor do I deem it worthy of such trouble." His commentary on it, therefore, is as near a nullity as possible. At the close of it he thus passes judgment: "I know that learned men have expended a multitude of criticisms on this book, and have accused it as the work of fraud, saying that it has nothing in it of the apostolical gravity and only drapes historical facts of the time with figure. The thoughts themselves, they allege, have in them nothing that is worthy of the apostolical majesty. To say nothing now of these critiques, I confess myself moved, among other things, by this, that the author, writing his revelations, takes much pains to indicate his name, saying again and again, 'I John.' I will not recall here that the style little resembles that of the gospel and the epistle. . . . These reasons, I say, might hinder me from believing that the Apocalypse was the work of John the Evangelist, if the agreement of all the world did not demand another sentiment, and especially the authority of the Church; although I can hardly believe that the Church, receiving this book, wills that we should accept it as of John the Evangelist, and hold it to have the same weight as the other canonical books. . . . When I consider the malice of the heretics I am near thinking that Cerinthus, who lived at the time of St. John, and who, I think, survived him, composed this book to spread his poison through the world. But, on the other hand, I cannot persuade myself that God should have permitted the artificer of the demon to have deceived the Christian world during so many ages. . . . This book is worth nothing for proof of doctrine or controversy; but it has great interest as to the origins of the Church. Among jewels there are some more precious than others, and gold may be purer and more proved than gold. So among sacred things some are more sacred than others. The spiritual man, St. Paul says, judges of all things, and he himself is judged of no man.'

But the commentaries, and even the critical decisions,

of Erasmus are of comparatively slight importance. What connects him with the Bible of the sixteenth century is his most interesting and most important relation to the Greek Testament as it is read in modern times. This again links him with another name for ever illustrious, that of Cardinal Kimenes, the founder of the Complutensian Polyglott. M. Berger gives an agreeable sketch, circuitously showing the

connection, which we shall digest in our own way.

In 1505, Erasmus wrote to his friend, Christopher Fisher: "While I was hunting in an old library (the hunter coursing the forests finds nothing so delightful) there fell into my nets a rare thing, the Annotations of Laurentius Valla on the New Testament." This very year Erasmus published in Paris this book, which was no other than a very imperfect essay towards a correction of the text of the New Testament by extant manuscripts. Valla wrote this in 1444. He had in his hands seven Greek manuscripts of St. John, three of St. Matthew, and probably some of the other gospels. Erasmus, reading the little book of this learned Humanist, saw at a glance that there was a great reform to be accomplished. Did he see also at a glance all the consequences that were to follow? We may doubt that. But, before a concurrence of circumstances and his own critical genius had time to make him the first editor of the New Testament, a rival was in the field elsewhere. As has happened more than once in the history of literature and science, two names were to dispute the palm for ever. A great prince of the Church, who was able to unite in himself the characters of a liberal and enlightened spirit and a grand inquisitor, the Cardinal Archbishop of Toledo. Francis Ximenes de Cisneros, had undertaken the immense work of publishing the Bible in the original tongues and in the principal versions. The first labours, which were to issue in the Polyglott of Alcala, had commenced as early as the year 1502. It would be very interesting to follow into their laboratories the first two, or, we may say, the two first editors of the Greek text. An exhaustive dissertation on the subject has been published by Dr. Delitzsch; but we will content ourselves with a few fragments of M. Berger's account.

In the immense labour which he had undertaken Ximenes was assisted by a number of learned men and theologians: for the Greek language Antonio de Nebrija, Fernando Nunez or Nonnius Pincianus, one of those who introduced Greek into Spain, and especially Lopez du Zuniga or Stunica, a man of high elevation as well as science, who has been supposed by some to have been really the main editor of the Greek text. It is certain that he laboured on the Acts and the Epistles, and that he was a diligent student of the few manuscripts that came in his way, not excepting the *Vaticanus*, which, however, he handled only in Rome, and after the Polyglott was printed, though not as yet published.

M. Berger refers to another promised work of Delitzsch which will probably throw much light on the critical value of the great Polyglott of Ximenes, with a complete account of the manuscripts he was able to employ, and a determination of the question whether he enjoyed the benefit of collating the *Codex Vaticanus*. Meanwhile, we give the substance of his account of the appearance of the two

great works.

The New Testament of Alcala was finished as early as 1514; but, the licence to publish being yet wanting, it was not given to the world. Frobenius was aware that it was coming, and was smitten with the ambition to anticipate the Spanish editor. On April 17, 1515, Beatus Rhenanus wrote, on behalf of the Basle printer, to Erasmus, then in England, promising him the utmost for his New Testament. Erasmus at once set to work. The first edition of the New Testament is dated February, 1516. One might think it impossible to accomplish in ten months the immense labour of publishing for the first time the New Testament. Never was a work pursued in such haste. Erasmus was at the same time toiling on his St. Jerome, and at least four other books; and notwithstanding the printers demanded of him each day a sheet and a half of folio. With a candour that disarms criticism Erasmus confesses that he had hoped to find in Basle correct manuscripts; but that he had the exceeding trouble of correcting them for the typographers himself. He scarcely allowed Writing to Pirhheimer he says: himself time to eat. "Novum Testamentum . . . præcipitatum fuit verius quam editum." Of course, Erasmus was not now engaged on his first researches in the text. We are told that he had for a long time been preparing notes for an amended Latin translation. On July 11, 1511, he had written to Colet. "I have finished the collation of the New Testament." But how must the savant of Rotterdam have been

disenchanted when he saw what manuscripts Basle had to That on the gospels which was his basis is offer him! hardly earlier than the fifteenth century: the Religious of Basle had paid two Rhenish floring for it, and Michaelis thinks they paid dear enough. His codex for the Acts and Epistles goes up to the thirteenth or fourteenth century: it had been the property of the preaching friars. Scrivener thinks that he consulted a manuscript of St. Paul's Epistles which belonged to the Dominicans of Basle, less known than the preceding. In the correction of his manuscripts Erasmus had, for his first edition, though he did not make much use of them, two other codices of the twelfth or thirteenth century, and one of the fifteenth: the first, which he calls the Exemplar Capnionis, had been lent by the Dominicans to Reuchlin. None of his manuscripts, therefore, were really old.

This famous Codex Capnionis has been discovered by M. Delitzsch in the library of the Prince of Dettingen-Wallerstein. It is probably of the twelfth or eleventh century; the text is mixed up with the commentaries of Andrew of Cesarea; and moreover the copy Erasmus used was defective. It ends at ch. xx. 16 of the Apocalypse; and Erasmus ventured to supply the lacuna by retranslating, from the Latin of the Vulgate, these five verses. He does not conceal that he then "added three words to the New Testament." But, when in 1522 he had the text of the Polyglott in his hands, he was not conscientious enough to repay his debt to the authentic text of the Apocalypse. M. Delitzsch, who judges him severely, says: "Erasmus had not self-abnegation enough, nor enough of frankness, to profit by the edition of Alcala." The great rival, however, was elsewhere in the same condemnation. Ximenes allowed a note of Euthalius, which he had found on the margin of his manuscript, to enter the text of Heb. vii. 3.

As to the relative value of the two editions, M. Reuss has established, by a sort of mathematical calculation, that neither of them can absolutely claim superiority over the other. The text of the Polyglott appears to him, however, superior in some degree to the first Basle edition of Erasmus. Whilst the Polyglott had 600 copies struck, the first edition of Erasmus had 3,300. Editions succeeded with great rapidity. The second appeared in 1519, the third in 1522, the fourth in 1527, the fifth in 1535, and repeated in 1540 without change. Erasmus speaks much

of manuscripts forwarded by friends from all parts: two sent him by the learned Dean Colet from the library of St. Paul's. . . . One only of the manuscripts which he enumerates, besides those borrowed from Reuchlin, contains the Greek text: a manuscript preserved at Vienna, which he seems to have used for the edition of 1519. In a word, however numerous they were, their weight was slender. As to the Fathers whom he makes his testimonies, we may smile when we remember that Theophylact, Archbishop of the Bulgarians, has been made by Erasmus, reading carelessly, into a new author whom he names Vulgarius.

But there is another side to this; and we ought not to be too hard on the man who, single handed, shares with Ximenes the honour of giving to the world the text of the Greek Testament. "We are accustomed," says M. Berger, "to hear in France and Germany by turns the venerable Codex Aureus celebrated and the Princeps editor despised. But the author of such a work deserves some justice and much indulgence." Certainly Erasmus had some knowledge of the Codex Vaticanus. His friend Bombasis, the secretary of Cardinal Pucci, sent him in 1521 a copy of several passages from it; in 1535 he corrected by this original Acts xxvii. 16, and those who reproach him with neglecting it ought to remember how exceedingly difficult it was at that time to catch the most fleeting glance at it. But we must close with a reference to Erasmus' wellknown relation to the text of the Heavenly Witnesses.

Cardinal Ximenes, who placed the Vulgate between the Hebrew text and the Septuagint, or, as he says in the preface to the Old Testament, "between the synagogue and the Oriental Church, like the Christ, that is the Roman Church, between the two thieves," had printed in Greek, possibly on the faith of a manuscript of the fifteenth century, the famous passage of the Three Witnesses which stands on the Itala and in the Vulgate. Erasmus had omitted this suspicious passage; but the clamour of the obscurantists troubled him. In his third edition, that of 1522, he for the first time printed this passage; and in his apology, written to Stunica, in 1522 also: "This verse has been found in England in a Greek manuscript. After it, and to take away every handle for calumny, I have put back the passage whose absence has been blamed in my Greek Testament. But still I suspect

that the manuscript has been corrected after Latin texts." The manuscript referred to is preserved in Trinity College, Dublin; having the number thirty-four for the Acts and Catholic Epistles. T. Montfort gave it a name; and many hands, in the fifteenth or sixteenth century, have joined in writing it. M. Delitzsch suspects that Edward Lee, the adversary of Erasmus, fabricated it to mystify his enemy. This we have no means of verifying; but, be that as it may, the prop for Erasmus' timidity is a fragile one. Moreover, it was not precisely after the Montfortianus that Erasmus, who had at that time other scruples than those of science, printed in the edition of 1522 what has remained to this day in the received text.

Although we are anticipating, it may be remarked here that the palinode or recantation of Erasmus did not avail to save the passage in the estimation of all of his contemporaries, although it secured it a place for centuries in the received Greek Testament. At any rate, Luther was never induced to insert the verse in his New Testament. Calvin accepted it, but never permitted himself to use it in defence of doctrine. "All this," he says, "has been by some omitted: which St. Jerome thinks was the effect of malice rather than of ignorance or inattention, and was probably the work of the Latins." Colineus dropped the passage in his first edition of 1534, though that was based upon that of Erasmus. But he was the last editor for two hundred

years who had the boldness to exclude the text.

The Reformation was avowedly based upon a return to the Bible: the final appeal was to the Word of God from the superstitions of ages. It is therefore a question of great importance to consider what that Bible was which wrought such wonders, how its limits were determined, and what that faith in Scripture was which swayed the guides of the Reformation. There are many misconceptions on this subject: in fact, as usual, two extremes. Some write as if they thought that the Reformers started by establishing what the Canon of Scripture really was; and by making that the formal principle of the Reformation. justification by faith being the material principle. Others exaggerate the looseness of the Reformers, and would have us believe that they accepted Scripture just as far as Scripture squared with their views. We do not propose to treat the question either dogmatically or controversially; and at present shall avoid any reference to current diseussions concerning the Canon. We shall mainly furnish, or let M. Berger furnish, a few illustrations of the gradual development of opinion on the subject, at the dawn of modern criticism.

Luther, of course, is the central figure in every such inquiry. An investigation of his notions about Scripture is deeply interesting; and, to those who are not slaves to Luther's authority, very instructive. In this and in everything he stands out in the fifteenth century with marked distinctness.

The first thing to be said is that throughout the whole of his career he was deeply, it may be said enthusiastically, devoted to the Word of God. And as it is well known that he was loose enough in his adherence to some portions of the Bible, it is well to do him justice on the general question. In his exposition of Galatians i. 9, we have this testimony: "Now there are people who say that as I test Scripture I must be above it, that as the Church tests Christian doctrine it is above it. . . . Here we have, to confound this impious and blasphemous doctrine, a most clear text and lightning from heaven. St. Paul submits himself entirely and without reserve to Holy Scripture, throws himself at its feet, himself and all the angels of heaven, and all the doctors on earth, and all the theologians everywhere. Scripture is the queen, and must command alone: all must give her absolute submission." He wrote once in the flyleaf of a Bible: "Holy Scripture is the written Word of God, as it were incarnate in letters, in the same way as Christ is the eternal Word of God enveloped in humanity." As early as 1518, he tells Tetzel: "If there were thousands more of Fathers, and they all cried out together, they would not weigh anything against a single verse of Holy Writ." In the preface of his commentary on Genesis he says: "It is the Scripture. I say, the Scripture of the Holy Spirit which we deal with." "We must always keep before our minds that the Holy Ghost is the author of this book." "Scripture and experience are two witnesses, and like two touchstones of the veritable doctrine." Dropping the second witness, he says still later: "We must bring everything to the touchstone, the Word of God: nobis enim provocandum ad Lydium nostrum lapidem, ad verbum Dei respiciendum

This first sentence, which became afterwards the very

watchword of the Reformation, was Melancthon's. It was in constant use, and at last took its place in the forefront of the Formula Concerdia, "for the protection of the Lutheran Church against the slavery of symbols and the tyranny of theologians." We shall see by-and-by that the Catholic divines seized upon it too: in fact the Lydian Stone figures in almost all discussions. Luther never went further than this; but in his estimate it meant a great deal: what he thought Scripture was an absolute standard. The Reformed Church, however, did go a little further, and made the Scripture the source as well as the touchstone of all doctrine and practice. Two things now emerge at once: what is the word of God, and how is it to be interpreted? But the consideration of these points involves another, and, before reaching these, it must be asked whether Luther and the Reformers did not pay reason the same kind of homage which they paid to Scripture, -seeing that they made reason determine what was Scripture.—the same kind though not the same degree? M. Berger thinks they did: and is all the better pleased with them on that account. We are anxious, of course, that they should be vindicated from what in our judgment would be a very serious charge. But it is hardly possible to vindicate them entirely. M. Berger says: "A final question presents itself to us. We have seen Luther prostrating himself before the Bible. Does he not place reason on the same level?" This final question ought to have been almost the first; in that position its answer would have given much more concinnity and value to this 0888Y.

At the Diet of Worms, when the orator of the Empire demanded of Luther a plain answer whether he would retract or not, the Augustinian monk replied: "So long as I am not convinced by Scripture, or by an evident reason (for I believe neither in Pope nor in councils, since it is certain that they have often erred and contradict themselves), I am bound by the passages of Scripture that I have quoted; my conscience is the captive of the Word of God; and I cannot nor will I retract anything, for it is neither safe nor honourable to do anything against conscience." When a short time afterwards the Elector asked him if he would not yield "unless convinced by Scripture," he added, "Yes, or by clear and evident reasons." This addition he learned from St. Augustine,

his chosen author, and the patron of his Order. Down to the Diet of Worms he had used it habitually: there are many instances of his use of the formula, "Scripture and Reason." But it is remarkable that after the Diet he never used it again. In his account of the Diet of Worms, written in 1546, he omits the latter clause. He found how dangerous it was to make reason in any sense co-ordinate with Scripture in deciding upon points of faith. In fact, the entire history of his relation to the Word of God reveals a constant struggle between the homage that faith demanded and the private judgment that reason insisted upon. Faith triumphed but very slowly. The course of the struggle is marked, on the one hand, by such testimonies to the absolute supremacy of Scripture as we have quoted, combined with the most unqualified expressions of contempt for reason; and, on the other, by a systematic undervaluation of such parts of Scripture as did not satisfy his reason, judging by the analogy of faith. M. Berger gives us an admirable summary of what is well known on this subject, though too often ill understood.

It was the controversy with Carlstadt, one of his fellow labourers, that first detected Luther's weakness. And his views on the Epistle of St. James were the occasion. his work on the Captivity in Babylon (1520), he disputes on the number of the sacraments, and, with reference to a text quoted against him from that epistle, says: "I will not recall that many authors assure us, with high probability, that this epistle was not written by the Apostle James, and that it is not worthy of the apostolical spirit, although custom has given it, whoever was its author, its authority. If even it was written by the Apostle James, I should still say that it belonged not to an apostle to institute a sacrament by his private authority." This aroused Carlstadt. and a contest ensued, the personalities of which were very humiliating and may be passed by. Both theologians set to work to study the Canon. Carlstadt started with the principle that the sole basis of confidence is the authority of the Canon of Scripture as determined, not by individual judgment, but by the judgment of history. Luther's Canon was determined by another principle, the value of every book in its relation to Christ. Let us follow the two men a little more closely.

Carlstadt maintains that a book received by the whole Church is canonical whether the author be known or not,

and that those only are apocryphal which by the Church are rejected. Hence the Epistle to the Hebrews, "the most learned of all," is approved, and not less that of St. James. The Jews do not know who redacted the books of Moses, but their authority is not doubted. As to St. James, his words are remarkable, especially in their allusion to Luther: "We are told that someone wrote under the name of this apostle; but St. Jerome tells us how by slow degrees it gained its present authority. James has written, on works and faith, words which we could not, without evil will, refuse to see in St. Paul, in the Gospels, or in the Prophets." Carlstadt, however, agreed with Luther, Erasmus, and most of the Reformers and Bibletranslators of that time, in dividing the New Testament into three parts: in the first rank the Gospels and Acts, in the second the uncontested Epistles, and in the third James, 2 Peter, 2 and 3 John, Jude, Hebrews, and the Apocalypse. Before leaving Carlstadt, we must be indebted to M. Berger for a striking extract from A. B. C.—Andrew Bodenstein of Carlstadt—illustrating his quaint way of dealing with the Apocrypha, which he thinks may be used to fill up the ranks of our battalions in attacking certain people. "In an army the soldiers have not all one armour, but the captains send away none. So there are many books besides those mentioned which were written and used many years before Christ. The books of the Bible are soldiers armed and fit for the war; the others are naked, unarmed, and weak, but they fill up the troop, serve for parade, and are good for skirmishing. But, when the battle is engaged, and we are in the thick of it, there can be no play and we want the best soldiers. So it is with the books of Wisdom and the like: good enough for advanced guard and skirmishing, but too weak for the main battle. They give no mortal wounds, they take no prisoners, they make none heretics who reject them."

Carlstadt's theory of the Canon does not deviate much from that of antiquity; at any rate, he gives no good account of the reason of the difference. The Tridentine Council had not yet definitively pronounced what were and what were not canonical books. When its decree was fixed, its decision was professedly based very much on the same principle that Carlstadt lays down, the universal tradition of the Church. But then it was a tradition which was as vigorous, so to speak, in Trent, as it had ever been,

and did show its life by enlarging the Canon and creating new Scripture, as we shall see. Now let us see how Luther went to work on the same question.

It was in his Wartburg retreat that he first undertook what may be called the critical examination of the Bible. Armed with the first edition of Erasmus, he undertook his New Testament, and printed it in 1822, with certain prefaces of very great ability and value, whether considered as dogmatic and exegetical analysis, or as specimens of free investigation into the text and structure of the books. Having reached the Epistle to the Hebrews, he finds it necessary to explain the reason of the change he has introduced in the order of the writings. The Epistle to the Hebrews, those of James and Jude, and the Apocalypse, are displaced from their rank and thrown to the end of the volume. "Till now we have seen the principal books of the New Testament, those which are true and certain. These four have been otherwise regarded in antiquity. First, we see that this epistle was not written by Paul, nor by any apostle, since the author writes as one who had received his doctrine from the apostles, which Paul denies that he did. Besides, this epistle presents a hard knot, as in chaps. vi. and x. it refuses repentance to those who have sinned after baptism; and in chap. xii. asserts that Esau sought it in vain. This seems quite contrary to the Gospels and St. Paul's Epistles. . . . Yet it is a noble epistle, which speaks with learning and authority of the priesthood of Christ, and uses richly and skilfully the Old Testament. . . . And, although it does not lay the foundation of the faith, which was the mission of the apostles, it builds on this foundation, with gold, silver, and precious stones. Let us not be moved if sometimes there is mixed wood, hay, and stubble; but let us receive with respect this fine work, without putting it on an equality with the apostolical epistles." After many waverings, Luther at last assigned the work to Apollos; and in his Commentary on Genesis, at the close of life, seems to be reconciled to the passage about Esau's repentance.

But it is in his judgment of the Epistle of St. James that he gives us his leading principle for the settlement of the Canon. After dwelling on its contradiction of St. Paul and all Scripture, in attributing rightcourness to works, he goes on: "Secondly, it professes to teach Christians, and its author does not find time to speak once of the sufferings

of Christ, His resurrection, His Spirit. It names Christ often, but says nothing about Him, speaking only in general of a faith in God. . . . All the true books agree in preaching Christ, and leading to Him. That is indeed the true touchstone by which we must judge all books. marking whether they lead to Christ or not. That which teaches not Christ is not apostolical, though St. Peter or St. Paul should have written it. But that which preaches Christ is always apostolical, though the work of Judas, Annas, Pilate, or Herod." Luther never gave up his rash judgment. He does not shrink from saving in his Commentary on Genesis, written at the end of life, but not printed while he lived: "James is wrong in concluding that Abraham was justified as the issue of his obedience. . . . James delirat when he says, therefore works justify. Let our enemies cease from constantly quoting him against us." Whether they ought to be printed or not, these words are found in the Tabletalk: "Many have toiled, laboured, and sweated over this epistle, to reconcile it with St. Paul. Melancthon has tried in his Apology, but he did not think seriously about it, for the thing is matter of a formal contradiction; faith justifies, faith justifies not. He who can make these sentences agree may put my doctor's bonnet on his head, and count me only a fool." The worst words however, and those which are usually quoted, were really retracted; at least the later editions of the New Testament do not contain the following passage, which we quote, not for the sake of this question—about which enough has been said-but to show them what was the guiding principle of Luther in his settlement of the Canon. The edition of 1822 said in the Preface as follows:

"After all this, you will be able to compare the books of the New Testament, and judge which are the best. For the Gospel of John, the Epistles of St. Paul, especially that to the Romans, and the first Epistle of St. Peter, are the nucleus and marrow of the New Testament. Christians should make these first, as their daily bread. . . . If I must lose one or other, the works or the preaching of Christ, I would rather lose the works than the preaching. For His works could not save me, but His words give life as He said. And, as John speaks little of the works of Christ, and much of His doctrine, whilst the other evangelists speak much of His works and little of His discourse, the Gospel of John is the sole, the tender, the

true and principal gospel; it ought to be placed much above all the others. Similarly, the Epistles of St. Paul and St. Peter far surpass the three Gospels of Matthew, Mark, and Luke. . . That is why the Epistle of St. James is truly, in comparison with them, an epistle of straw, for it has not the manner of the Gospel."

It would serve no good purpose to give evidences of Luther's freedom of spirit in sitting in judgment on other books which we now reverence. He anticipated some of the later scruples which embarrass many who are better armed against them than he was, and some of his occasional remarks show how great he would have been in this province had he devoted to it more time, and had he not been so warped by his deep devotion to justification by faith, that it rendered him insensible to every plea where he thought that doctrine in danger. As to the 2 Peter, he says: "St. Peter renders here a testimony to the Apostle Paul, which plainly shows that this epistle was written long after those of St. Paul. And this might lead us to suppose that St. Peter did not write it: as also that passage in which he says, in the same chapter, that God wills none to perish but all to come to repentance; for he descends a little below the level of the apostolical spirit. Nevertheless it is allowable to believe that the epistle was written by the apostle." . . . The judgments pronounced on the Revelation we dare not quote, especially as they were gradually abridged down to almost nothing. Our author takes leave of this subject with the following words: "Thus Luther, who set out with the boldest judgments, winds up with a resignation that seems almost like indifference to questions of This change of front has in it nothing to criticism. During the first years of his career the astonish us. Reformer struggled against himself and against the world to establish the principle of salvation—justification by faith. Impetuous as he was by nature, he overturned all obstacles and broke down all barriers. In the years that followed Luther never changed his sentiment: but for him the interest was removed to another quarter. He has not said anything different, but he has not said it as he used to say it."

For ourselves, we should take a rather different view. Carlstadt's more temperate way of showing respect to the judgments of antiquity, and the abuses of his own free principle which Luther had the pain of witnessing, tended

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much to modify his views. But, reserving our comments on the several theories of the Reformation age, we will follow M. Berger in his treatment of the Genevan Reformer.

Calvin's answer to the question, "Whence and how we may be persuaded that Scripture came from God, if we do not take refuge in the decree of the Church," always comes back to the self-evidencing light, or the testimony of the Divine Spirit who gave it. He never gives a definition of the authority or infallibility of the Word of God. M. Berger points to that beautiful sentence that Scripture is the "unica perfects sapientise regula;" and says that "all his doctrine rests upon its authority, and the reason why he does not make it an article of faith, and does not mention it in the first edition of his Institutes, is that he makes it his point of departure and basis." To ask, Calvin says, how we know the Bible to be Divine, "is to ask how we come to distinguish light from darkness, white from black, sweet from bitter. The Scripture has that in it to make itself known in a manner as infallible as white things and black show their colours." His profound submission to the Word of God is the same as Luther's. Both bowed with absolute submission to what they understood to be the sayings of inspiration. But Luther decided what was inspired by its conformity to his notions of Christ and His salvation; Calvin by its commending itself to his spiritual taste through the influence of the Spirit. But that is not all. Calvin always and consistently asserts that the Word of God in every part of it approves itself to the believer by the testimony of the Spirit, "Who is the seal and pledge to confirm our faith, so that we really must swim in doubts and scruples until inwardly enlightened." And, with the tranquillity that marks his theology, he leaves the defence of His Word to the Spirit Himself. We cannot forbear from quoting some sentences selected for us by M. Berger.

"If we read Demosthenes or Cicero, Plato or Aristotle, or others of their class, I confess that they are wonderfully attractive, and delight and move the soul even to ravishment. But, if we pass from them to the reading of the Holy Scriptures, they touch us so keenly whether we will or not, they so thoroughly pierce our hearts, and infix themselves in our inmost marrow, that all the force which the rhetoricians or philosophers exert is in the comparison

no better than smoke. Whence it is easy to perceive that the Holy Scriptures have some Divine property to inspire men: surpassing, as they do so far, the utmost graces of human industry." "But St. John above all, as if thundering from heaven, may well captivate all spirits to the obedience of faith; or, if they remain rebellious, he is more powerful than all the thunders of the world to abate all the more their obstinacy. . . . There are many other reasons, and very plain ones too, by which the majesty and dignity of the Scriptures may be not only assured to the hearts of the faithful, but also mightily maintained against the malice of calumniators. Which reasons, nevertheless, are not themselves sufficient for the true foundation of his certitude until the Father in heaven, making His Divine glory shine into it, exempts it from all doubt and question. giving to it its awe and power. Now that is only known by faith.

The following words will show the freedom of Calvin in dealing with the fabric of Scripture, and at the same time give further evidence that he found in the special relation of the Holy Ghost to the construction of the Bible the key to a solution of all difficulties. It is this which seems to us the noblest feature of Calvin's doctrine. He rejects the notion of Jerome that the Gospel of St. Mark is an epitome of that of St. Matthew; the former does not observe everywhere the order of the latter: he throughout showing another method of treating his subjects; putting in things though by St. Matthew omitted; and in reporting the same matters sometimes reports them more at length. "For myself I think, and the evidence justifies me in thinking, that he had never seen St. Matthew's Gospel when he wrote his own; so utterly wrong is it that he was abridging him. The same would I say of St. Luke; for it would be hard to think that the differences among them could have been introduced designedly. But, when they purposed to write down things of which they were firmly convinced, each of them went to work in the way that seemed best to him. Now as all this did not take place fortuitously, but under the Divine Providence overruling the whole, we must suppose that the Holy Ghost suggested to them at least a sure agreement in the midst of diversities so far as concerns the principal thing. And that itself would suffice to give a warranty for their works, if there were not still greater arguments to authenticate them."

The same remarkable indifference to many things that are exceedingly embarrassing to modern criticism and exegesis, might be abundantly illustrated by reference to Calvin's writings. His intense feeling for the power of the Spirit present in the Word made it a light thing to him that discrepancies and differences in the several records may be detected. He was quite sure that with the Spirit were the secrets of the composition of the books, and he troubled himself no further. And his high confidence in the system of doctrine contained in the New Testament as a system for ever settled in heaven-raised him immeasurably above any petty anxiety to find specific texts in favour of cardinal truth, as also above being anxious to defend his leading dogmas from the suspicion of being contradicted by individual texts. "The impartiality of Calvin," says M. Berger, "is perfect in his acceptance of the Heavenly Witnesses, since he does not use the passage in question for dogmatic purpose." Calvin, in fact, was much too indifferent in this matter; and was disposed too readily to sacrifice a Scriptural argument. "This," he says, "means that they are one in purpose, rather than in essence." In the same way he admits that "I and the Father are one" is a passage which the ancient Fathers very much abused. Again, when writing on Matthew xvi. 18, he speaks in the most impartial way of the primacy of St. Peter: "For dignity and supremacy are very different things." Some of the great passages that sustain the Divinity of Christ are commented on with undue indifference as to their peculiar value. In fact, Calvin was never to be warped from what he deemed the thread of the discourse, and the natural sense of the words, by any consideration whatever. We are struck by observing that his Commentary on the Romans does not contain a single word about the doctrine of predestination which had just been expounded in a most elaborate manner in the second edition of the Institution. The expositor follows word by word and sentence by sentence the text of St. Paul. and seems unconscious of anything but his author's train of thought: whence the doctrine found is of a moderate kind and such as few could fairly reject. And his words have a remarkable dignity when he exhorts to submission and reverence. "Let us carefully note this, that we must seek here nothing more than Scripture teaches. When the Lord shuts His sacred lips, let us also shut the door of VOL. LIV. NO. CVII.

our spirits." "For myself," he says, when speaking on the Epistle to the Galatians about allegorising, "I confess that Scripture is a fountain of all kinds of wisdom, inexhaustible and never to be repaired to in vain; but I deny that its riches and abundance consist in diversity of meanings, which every one may use for any good purpose he may think proper. Let us seek to know the true and natural meaning of Scripture, that which is simple and artless. Let us reject all other expositions which have controversy for their end." Now principles like these would be an effectual shield, even without that profound reliance which Calvin had on the mysterious wisdom of the Holy Ghost even in the paradoxes and

anomalies of Scripture.

As to Calvin's judgments on individual books, the records of which are, like Luther's, in the arguments of the commentaries, it would take many pages to illustrate by quotation. The sum is this, that he accepted the Hebrews as an apostolical epistle, ascribing its ill credit to an artifice of Satan. He holds it to be a most precious testimony to the sacrifice of Christ, but certainly not from St. Paul; and, feeling its unspeakable holiness, thinks the authorship a small matter. The First Epistle of Peter he thinks was written from Babylon, as many Jews were there, the special objects of his ministry. After giving a very fair account of the difficulties suggested by the style of the Second Epistle of St. Peter, he says. most characteristically; "For to say that the author disguised himself under the name and attributes of another would be self-condemning; such simulation would be unworthy of a servant of Jesus Christ. My opinion then is that, as we hold the epistle worthy to be retained, we must ascribe it to the apostle Peter: not that he wrote it himself, but that, at his commandment, one of his disciples gathered up and compressed briefly what the need of the time required. For it is probable that he was then very old, as he speaks of himself as being near death. And it might well be that in his latter days being asked by the faithful he allowed this record and memorial of what he thought to be preserved, in order that after his decease it might in some way serve to confirm the good and repress the evil. Be that as it may, since in all parts of the epistle the majesty of the Spirit of Christ is clearly manifested my conscience will not permit me to reject it entirely, although I do not recognise in it the true and natural phrase of St. Peter." No other writer of the age pays this tribute to the self-evidencing light of the Spirit in the

epistle; the testimony is worthy of Calvin and of Calvin's grand principle. It is true that he speaks of its "being a point settled among all, with one accord, that so far from there being anything in it unworthy of St. Peter, on the contrary from one end of it to the other we perceive the virtue, vehemence and grace of the Spirit with which the apostles were endowed." But we have seen that Luther had not this high and generous sentiment. His absolute submission to what he thought the treatment of Christ did not keep him so faithful as Calvin's submission to the testimony of the Spirit's influence. While Calvin seems to imply that St. John wrote only one epistle, as to the Epistle of St. James it is refreshing to hear him: "We know from what Jerome and Eusebius say that this epistle was not received by many churches without debate and struggle. And there are some in our own day who scruple to receive it as authentic Scripture. Nevertheless I, for my part, seeing no sufficient cause for its rejection receive it willingly and that without any difficulty whatever. For, if it seems that the second chapter overturns the doctrine of gratuitous justification by faith, that is a doubt which our exposition of the passage will remove. And if it may appear that it does not magnify the grace of Christ in the manner appropriate to an apostle, the reply is obvious that we must not expect every one to take up the same argument or exhibit the same point of view. . . . Wherefore, it is enough for me in receiving this epistle that it contains nothing unworthy of an apostle of Christ: on the contrary, it is quite full of Divine and good doctrines. . . . As to the author there is more reason for doubt: my opinion is that the James of whom St. Paul speaks was the son of Alphæus. But it is not for me to affirm which of the two Jameses was the author.

It cannot be said of Calvin that he allowed his subjective criticism of the Word to influence him in the rejection of any part of the Bible, as the Canon was finally settled in the fourth century. He took warning by the example of Luther, and bequeathed a much better example to posterity. But the effects of the principles of the two chief leaders of the Reformation on the subsequent development of Scripture criticism and exposition we must postpone for another article.

LITERARY NOTICES.

I THEOLOGICAL.

ECCE CHRISTIANUS.

Ecce Christianus; or, Christ's Idea of the Christian Life.

An Attempt to ascertain the Stature and Power, Mental,

Moral, and Spiritual, of a Man formed as Christ intended.

London: Hodder and Stoughton. 1879.

THE thesis which this work proposes to establish is most singular, and, barely stated, most extravagant. It is nothing less than that all Christians may and ought, intellectually as well as in other respects, to equal prophets and apostles, and far to surpass intellectual greatness of a worldly order like that of Plato and Shakespeare. Extravagant as the thesis undoubtedly is, there is nothing extravagant in the way in which it is supported. The author argues from such grounds as the Divine force of love to Christ, the high import of faith and prayer, the effects of the indwelling of the Holy Spirit, much that is excellent being said on each topic. The tone of thought and language alike is that of high culture. Occasionally a little strained, on the whole it is rich and dignified. The high note struck at first is admirably sustained throughout. But as to the main subject of the book. the author will not find many to agree with him. As far as moral and spiritual excellence is concerned, we go with him. That the humblest real Christian stands higher than Plato or Shakespeare we believe; but this is only saying that spiritual is a higher order of greatness than intellectual. But the main purpose of the present work is to prove that Christians may rise to the same intellectual power as Moses and Paul, and that only removable hindrances stand in the way. Not only is this the strain of the whole book. but two chapters are specially devoted to "The Moral Value of Intellectual Power," and "The Mental Result of Following Christ." In three interesting chapters the author shows by

Notices of several Commentaries and other Theological Works are unavoidably postponed, and will appear in our next issue.

minute analysis how far the ideas of Plato's Republic and Shakespeare's dramas are below those of the New Testament.

But the mention of Plato and Shakespeare suggests the fallacy underlying the author's thesis. He leaves out of sight altogether the special inspiration of prophets and apostles. The truths communicated to the world by inspired men were not elaborated out of their own minds, but given to them. To them "thoughts beyond their thoughts" were given. The ideas, whatever may be said of their verbal dress, came from heaven. The Evangelists, for example, did not think out Christ's life, but simply described what they saw. Does the author mean that all Christians may become subjects of Divine inspiration the same in kind and degree as that of the writers of Scripture? We presume not. And yet in what other way can the equality of which he speaks be realised! Is it a fact that Paul and Peter, apart from the specific endowment of inspiration, were greater intellectually than Plato or Shakespeare! If so, it is strange that the world has no proof The theory of the author obliterates the distinction of it. between Scriptural and ordinary inspiration as effectually as Rationalism does, but in the opposite direction. He seeks to level up where Rationalism would level down. The only result is to confound things essentially different. Besides, mere ability to appreciate an author does not imply equality with an author. If it were so, the world would be full of Miltons and Walter Scotts, and so on. Another obvious question is, Why have we not seen intellectual giants produced in the way here described? Why are they not common in our churches? We do not remember having met with any.

Again, the author ignores the vast innate intellectual differences between individuals. Why should a Shakespeare or Milton or Burns appear in a particular family, the other members of which are the commonest of common clay? To such questions as this no answer can be given. The author proposes a theory for levelling these differences and bringing about a state of universal mental equality. We fear that the notion is as imaginary as the political and social equality dreamt of in other quarters.

Apart from the untenable theory which the book is meant to advocate, there is much in it that is beautiful, suggestive, and stimulating. Take the following specimen: "The reason why one man is so carefully elaborated is that he may serve as a model and stimulus to others. The Divine artist takes special pains to perfect one creation of singular beauty, because He knows that that one will secure thousands of imitators. One Christ has commanded the reverence of the world, and one man made something like Christ would probably, in the next generation, cause thousands of such men to spring into being."

PRESSENSE'S CONTEMPORARY PORTRAITS.

Contemporary Portraits. By E. de Pressensé, D.D. Translated by Annie Harwood Holmden. London: Hodder and Stoughton. 1880.

THIS is chiefly a collection of essays that have been published before in various French reviews, and certainly the majority of them deserve to be thus disinterred. They treat either of men who have in some measure ruled their own age, or of questions which year by year press with greater insistency for settlement. And whether M. de Pressensé is producing his own recollections of his contemporaries, or assailing such of their opinions as differ from his own, he displays the literary skill and finish that are familiar to his readers. He narrates his incidents in a style that is popular without being diffuse, and interprets his ideas with clearness and brevity. Free in his criticism, he is yet reverent in his handling of convictions which he rejects. And though he deals with themes so repugnant to his taste as the Papal claims to authority over conscience on the one hand, or on the other the relations of Evangelical orthodoxy at its worst period to outsiders, he willingly grants to others the same liberty of belief that he claims for himself, and uses no worse vocables than "narrow" and "superstitious." We by no means belong to his school. To us he appears to surrender some dogmas which are true as well as traditional, and to hold others which are as doubtful as they are extreme. We have nevertheless read these essays with much pleasure, and admire greatly the power of analysis and the catholicity of spirit which their author manifests.

With the exception of the last of these "Portraits"-a most beautiful picture of Frederick Robertson-one purpose links them all altogether. They may be regarded as the author's contribution to the solution of the problem as to the right relationship between the Church and the State. His own theory is that between the two there ought to be no relationship whatever, but that either should be entirely independent of the other. And in maintaining that theory he does not shrink from its ultimate consequences. He quotes approvingly Verny's words: "Liberty of conscience is not merely the competence to decide between one religion and another; it is also essentially the right not to accept any." And consistently therewith he urges that the worst contemners of conscience have the right, if they so please, to contemn it. Geffcken's theory of the civil union of the two powers in mutual independence—the State encouraging without controlling the Church—is dismissed as a "chimera," with neither reason nor moral affinity on its side. And the only duty of the State with

reference to the Church is held to be, to defend itself against everything that threatens its safety. But it is obvious, inasmuch as the discharge of that duty would compel the State to enforce the strictest religious equality, to tolerate every so-called religious manifestation, however extravagant, that did not thrust itself into the claws of civil law, and to insist upon theological discretion and mutual forbearance amongst sects, that M. de Pressensé's theory of an entire separation between Church and State is incompatible with the task which he assigns the State. For if the State is to insist upon denominational forbearance, it must inquire into the "theology" of the persecuting denominations, and it must make aggression against it by legal process when overt acts follow. Because Nihiliam is a religion as well as a political creed, the civil power must, according to our author, not only tolerate it when it is preached, but even see that it is preached without undue interference. Only when it begins to conspire, and when the mischief is done, does it become the duty of the State to repress. Such a theory may serve in a future age when error has been so far weakened that by conscience all men mean the same thing. But meanwhile social purity and civil safety require that, whilst religious scruples and the independence of conscience are respected, the tendency to call darkness light be remembered and effectually guarded against.

Bearing in mind the inconveniences of M. de Pressensé's views, we can enjoy with unmingled pleasure these "Portraits" of his. Thiers, who supported the temporal power of the Papacy and believed in the wisdom of Napoleon's concordat, and Dupanloup, whom the Vatican Council transformed from the most liberal of Gallicans into the most submissive of Ultramontanes, figure as instances of great careers damaged by mistakes in the matter of religious liberty; whilst Arnaud de l'Ariège, Alexandre Vinet, and Verny are splendidly-drawn types upon the other aide. Another essay traces the gradual changes in the opinions of Adolphe Monod on the subject, which is further treated in a contrast between Voltaire and Strauss, and in an account of the antecedents of the Vatican Council. The principles and results of the "culturkampf" in Germany are described in a notice of Herr Geffcken's historical dissertation on the relations of Church and State. But in none of these cases does M. de Pressensé confine himself to what we have indicated as apparently the connecting link in this collection of easays. A short sketch of the outward life, and a brilliant exposition of the main characteristics, accompany every portrait. And the volume closes with a valuable etching of Robertson, which gives proper prominence to his marvellous abilities, but does not omit the defects and errors over which his disciples mourn.

STANFORD'S HOMILIES ON CHRISTIAN WORK.

Homilies on Christian Work. By Charles Stanford, D.D. London: Hodder and Stoughton. 1879.

MARKED by the same characteristics as the author's former writings-freshness both of thought and style, happy quotations culled from a wide field, apt illustration, genuine religious impulse and fervour. The subjects answer very well to the title, being all of a practical type. There are addresses to ministerial students, teachers, ministers, and workers of all kinds. Any minister or student will be better for reading Mr. Stanford's homily on "A workman that needeth not to be ashamed." A minister must first be a man, then a workman, and if so will not need to be ashamed. Some plain, direct words are spoken on the physical, mental, and moral characteristics which go to make a man. A minister must be a workman in order to the necessary preparation, to know God's Word, to rightly divide it, to present it in the best way. The stock objection against ministerial training and study from the case of the Apoetles is vigorously exposed. It is shown how the training under the Master Himself included every branch of discipline. Mr. Stanford is especially earnest on the importance of independent reading and study. In these days of cheap mechanical helps of all kinds, the counsel is most timely, supported as it is by the speaker's own example. "Mere imitators of other men most naturally copy what is easiest to copy, and what is easiest is sure to be some striking mannerism or defect. For instance, in Robert Hall's time the students of Bristol tried not only to roll his raptures and to catch his fires, but to imitate the pain in his back; at least, Mr. Hall once told me that they used to imitate the involuntary movement of the poor hand caused by that pain. It is one thing to mimic the limp of Vulcan, another to fashion the shield of Achilles . . . No more than a bird can learn to fly with another bird's wings can a man learn to think with another man's thoughts, or to work by appropriating another man's workmanship . . . Even illustrations will be worth little, unless you have earned the right to use them by your own labour. They will not fit, they will not be apt, they will not be characteristic of the speaker." The following description of busy idleness is also seasonable: "The Prophet tells us that a pastor after God's own heart is one who 'feeds the people with knowledge and understanding; but the pastor after man's own heart is often one whose work is measured by the number of stairs that he climbs, or of hands that he shakes, or of syllables that he articulates. Let him be active in body, and then however inactive in mind, he is looked upon as a devoted workman. I hope there is not a young

minister here who thinks lightly of true pastoral visitation: but much that goes under that name is but a mere degradation of manliness, a waste of strength, a lounge of busy idleness through the world of small facts and petty impulses in which gossips live, and so far from being a part of pastoral work, is one of its most serious hindrances." The following biographical reminiscence from the same homily is full of interest: "When I was about seventeen years old—pardon the self-reference—I one day stood in a certain hushed chamber, lifted a white cloth, and looked on the face of John Foster, grand in the solemn unfathomable calm of death. Then I stepped into the study, where everything was just where he had left it. There was the old frayed gown, flung on the old rickety cane chair, just as he had left it. There were the great horn-framed spectacles, just where he had put them down for the last time. There was Bohn's wonderful catalogue that he had been lately speaking about. There, on the carpetless floor, was a box labelled 'From Strong's, College Green,' and perhaps containing rare prints to be opened some day. All around were books, and many of them rare copies of rare editions, but all huddled on the shelves as if by accident—to be set right some day. Everything seemed to speak typically about a workman called away from his unfinished work. The great workman was gone, where was his work? Surely there had been many conversions to crown such a ministry; there had been vast congregations who had crowded to rejoice in such a light. Where were they ? They never had existence. The work done was too deep for statistics, too sublime for show, too vast to be finished in an earthly lifetime."

LEWIS'S SIX DAYS OF CREATION.

The Six Days of Creation; or, The Scriptural Cosmogony, with the Ancient Idea of Time-Worlds in Distinction from Worlds in Space. By Taylor Lewis, LL.D. New Edition. Edinburgh: Clark.

WE are glad that a new edition has been called for of this valuable book. Mr. Lewis takes high ground. The mass of scientific theologians, he remarks, are content to say, "The Bible may have such and such a sense; it must have such a sense to be consistent with acknowledged science; therefore, on the principle that all truth must be consistent with other truth, it actually has this sense." Such reasoning, however correct, is unsatisfactory, because it rests only subordinately on the Bible. Our author discusses the whole question from the Scriptural or philological side; and he claims to be the first who has done this, for other exegetical writers assume a certain rendering to be literal, and

therefore indisputable. Dr. Lewis, in a long metaphysical introduction on language, endesvours to get the right hermeneutical standpoint, and get back to this primitive conception, in which, he thinks, the time idea was predominant over that of space

magnitude.

He rightly remarks that our first question, in dealing with Genesis i., is, "What was the Divine record meant to teach !" This can only be determined from the record itself. See what it does teach, and, that ascertained, we have just what it was designed to teach. And in interpreting, "We must not suffer any outward difficulties which modern seience may have suggested to deflect us from their fair meaning, or refract its direct light; yet we must allow these difficulties their full and proper effect in causing us to examine more carefully whether some other prepossessions may not have drawn us as much away into errors lying in a different or even opposite direction. The danger is lest we judge of a record made for all ages by certain scholastic notions of comparatively modern centuries." All human speech, earlier speech especially, we must remember, is phenomenal, and God can only make a revelation to us through our conceptions.

The following is a valuable and often neglected caution: "We sometimes blunder in respect to the real force the ancient writer meant to give to the term he employs. We see the image in the etymology, and it becomes the main sense to us, although it may have been already obsolete to him, notwithstanding he still employs the established language; or else we mistake the conception for the fact, or treat it as we would a metaphor in poetry." The nature of phenomenal language he illustrates from such examples as "the voice of the Lord walking in the garden." "Here (he says) is a conceptional term. Kol-Jehovah is the Hebrew phrase for thunder. In Job and the Pealms it comes to have very nearly the force of our word, as in Ps. xxxix. 3. The translators in Genesis have given the phenomenal rendering; and this is best, because the most vivid, and most true to the ancient conception. To the English ear, however, it may make the Lord the subject of the participle walking, whereas if taken in analogy with other places it might be truly rendered 'they heard the thunder going forth towards the evening; for the word translated walking may refer, as every Hebrew scholar knows, to impersonal as well as to personal agents. It is applied to the waters of the flood, and in Prov. iv. 18 to the going forth of light. It admirably represents the phenomenal conception attending one of those long rolls or peals which seem to traverse the whole horizon. Science can never wholly obliterate this early phenomenal conception of man's soul, nor can any amount of epicurean boasting do away with the impression that God is near us in the thunderstorm." This is a fair sample of our author's

method—always reverent, never giving in to the crude assumptions of modern science, yet always ready to explain Scriptural language by the rule of common sense. We cannot say that we wholly agree with him; but we feel sure that both theologians and scientists may learn much from the way in which he deals with Scripture.

The way in which he makes his theory bear on the interpretation of prophecy is very curious. The light thrown on passages like "the everlasting hills," by whom also He made the worlds," &c., is considerable. We recommend the book to all who are not content with the usual superficial way of accepting the letter of God's Word.

GRIFFITHS'S DIVINE FOOTPRINTS.

Divine Footprints in the Field of Revelation: A Brief Survey of the Bible in the interest of its Claim to be the Word of God. By William Griffiths, M.A. London: Hodder and Stoughton. 1879.

THE design and spirit and, to a large extent, the execution of this work are excellent. Its thoughtfulness, its believing and reverent spirit, its recognition alike of the claims of reason and faith, its familiarity with current objections to revelation, are all to be commended. The chief defect of the work—its cursory character -results from the breadth of the design as indicated in the title. A "Survey of the Bible" which professes to deal with both the form and substance of Scripture, to vindicate all its teachings from Genesis to Revelation, can only be "brief," and is in danger of being fragmentary and superficial. Such a design, to be carried out in such compass, would need the condensing power of a Bacon. Mr. Griffiths discusses the "General Features of the Bible, the Bible and Science, Miracles, the Fall, Mosaism, Prophecy, the Incarnation, Atonement, Salvation by Faith, the Kingdom of God," and many other points, each one of them enough to crowd a volume. In so far as it is right to criticise the design and plan of a work, it certainly seems to us that a single topic or aspect of so wide a subject, exhaustively handled, would be a far more effective apology than a brief, general survey. The first chapter on such general characteristics of Scripture as its style, unity and influence is by no means as strong as some of the following chapters. This part of the argument has nowhere been dealt with more effectively than in Henry Rogers's noble work on The Superhuman Origin of the Bible, a work which we would commend, and commend again, to our readers, and which, we venture to say, the more it is read the more it will be admired. Perhaps

it is the vivid impression of that argument which makes all others seem pale and weak in comparison. Nor can we commend the minimising course adopted by Mr. Griffiths on several points. Such a statement as the following is too broad: "The process of creation may or may not have been in keeping with modern views as to the formation of the world, for anything the Book has to say," page 58. No exception is made as to the "modern views" which faith may accept. Yet on page 62 the writer implies truly enough that there are some "modern views" which cannot be right, "for anything the Book has to say." "Scripture virtually protests against the notion of spontaneous generation, or our evolution not guided by reason, and contends for the theory that every product in nature has two factors." "It is only on the question of design that sceptical science clashes with revelation." We should also like to ask the author what he gains by suggesting that the accounts of creation and the sacrifice of Isaac are or may be parabolical? He truly enough says: "The knotty question must then arise, How far down in Genesis is the rule to be carried ?" One "knotty question" is set aside by raising another. What is there to indicate that of the two histories of Adam and Abraham one is parable and the other history! The subjective standard, once admitted, will carry a very long way. Some of the remarks and suggestions in the closing chapters on the difference between demonstrative and moral evidence are pertinent and worthy of careful thought. On the points indicated, and a few others, readers must exercise an independent judgment. With these exceptions, the work can scarcely fail to be helpful to intelligent inquirers.

HUGHES'S MANLINESS OF CHRIST.

The Manliness of Christ. By Thomas Hughes, Q.C. London: Macmillan and Co. 1879.

A MANLY book on the subject of Christian, i.e., true manliness. The chapters give the substance of readings with a Sunday class at the Working Men's College, and are for the most part a reprint from Good Words. Mr. Hughes says that young men's Christian associations have sometimes been charged with encouraging sentimentality to the injury of the stronger elements of character, and his book is intended to serve as a partial antidote. It is excellently adapted to the purpose, not so much by an exhaustive treatment of the subject as by its suggestiveness. We hope that other teachers, as well as young men, will profit by the course here sketched. The most interesting chapter to us is the second, in which the nature of true manliness is investigated. Mr. Hughes justly emphasises the moral element, and repudiates the notion

that mere physical courage is enough. Of the latter, he reminds us, the bulldog and weasel have more than enough. Physical courage, no doubt, forms the basis or instrument, but far more important is the purpose to which it is applied. "I think that the more thoroughly we sift out this question, the more surely we shall come to this as the conclusion of the whole matter. Tenacity of will, or wilfulness, lies at the root of all courage, but courage can only rise into true manliness when the will is surrendered; and the more absolute the surrender of the will, the more perfect will be the temper of our courage and the strength of our manliness." It is refreshing to find one who is generally regarded as a champion of "muscular Christianity" saying, "athleticism is a good thing if kept in its place, but it has come to be very much over-praised and over-valued amongst us." Athleticism does not even imply physical courage, but merely an active temperament and capacity of endurance. Nelson was courageous, but he would never have made an athlete. The following chapters review the life of Christ in the light of the subject in hand. While not full or minute in treatment, they suggest much for further expansion. There are one or two points to which we must take exception. Mr. Hughes seems disposed to assimilate the miraculous power of Christ to a kind of magnetic influence over animals, such as has sometimes been shown by ordinary men. We need not indicate how utterly inadequate such explanations are. How many of Christ's miracles would they cover t So in another passage he speaks of Christ coming to the Baptist with a sort of halfdoubting, half-believing expectation of finding in Him the Messiah. Such an inversion of the true facts of the case, we may safely say, was impossible, and has no support in the narrative. With these exceptions, the work is to be recommended for its good sense and healthy tone.

DREW'S REASONS OF UNBELIEF.

Reasons of Unbelief. With an Appendix. By G. S. Drew, M.A. London: Longmans, Green and Co.

A sort of counterpart to the author's Reasons of Faith, and marked by similar characteristics—sympathy with unbelievers, a sincere desire to understand and fairly meet their difficulties, and moderation in the statement of obligatory Christian faith. Such sympathy need by no means imply weak faith in those who show it. "Just as the pure are the most tender towards the fallen, so those who are the most fully convinced in their own minds are the most tolerant." The difficulties dealt with are only such as would occur to the thoughtful—the abstract nature of

Christian teaching, its want of continuity with the realities of nature, the character of revelation and its organs, objections founded on man's weakness and incapacity, in the survey of history and the prospects of the future—and they are dealt with in a thoughtful way. The author, it will be seen, does not touch upon the scientific objections of our day. His strength lies in another field. Mr. Drew often quotes Foster, Rogers, Martineau, Hooker, Isaac Taylor, Trench, Whately, and his own former writings. The notes in the appendix are in keeping with the thoughtful tone of the book. The whole work is a worthy addition to our growing series of Christian Apologetics.

WOOLMER'S HANDBOOK OF METHODISM.

A Handbook of Methodism: containing a Variety of Useful Information for Office-bearers and Members of the Wesleyan-Methodist Societies and Congregations. By Theophilus Woolmer. Eighteenth Thousand. Revised and Enlarged. London: Wesleyan Conference Office.

This little book has been for some years making itself a familiar companion to very many whose relations to Methodism make the instruction it contains matter of daily necessity. There is no need to say more about this new edition than that it includes everything and omits nothing which recent changes have introduced into the Methodist economy. It is literally what it calls itself, a Handbook; and presents in the simplest way a vast amount of information which is to be found in larger works only at the expense of considerable toil. There are few members of the Society, having anything to do with administration, who would not be both wiser and more useful if they had a good deal of it by heart,

GREGORY'S BOOK OF REVELATION.

Discourses on the Book of Revelation. With an Introduction. By the Rev. Alexander Gregory, M.A. London: Hodder and Stoughton. 1879.

EIGHTEEN popular discourses, marked by strong sense, clear thought, and vigorous, sometimes eloquent, writing. The author makes good use of recent works, like Gebhardt's, without binding himself to their interpretations. What will especially commend his volume to most readers is the tone of sobriety in dealing with a book which has so long been a battle-field of extreme Theorists, Preterists and Futurists, Historists and Speculatists. The Introduction gives all the preliminary information necessary

in a clear and pleasant form. Mr. Gregory is especially successful in showing how the characteristics of the book agree with a Johannine authorship. Of the world's future he is very hopeful and writes in glowing terms. He does not believe that the world is worn out or growing worse. "The world is very evil; the times are waxing late," might do for a mediæval monk but not for a modern Christian. And we think truth and facts are on Mr. Gregory's side. The whole work is well done and excellently adapted to give ordinary readers a just idea of a difficult book.

DESCARTES AND KANT

The Method, Meditations, and Selections from the Principles of Descartes. Translated from the Original Texts. Sixth Edition. With a New Introductory Essay, Historical and Critical. By John Veitch, LL.D. W. Blackwood and Sons.

Kant's Critique of Practical Reason, and other Works on the Theory of Ethics. Translated by T. K. Abbott, M.A. With Memoir and Portrait. London: Longmans, Green and Co.

BOTH these works are strongly to be recommended to lovers of philosophical reading. They include all that is essential in the teaching of two of the greatest leaders of modern thought. Any one who will master them will know all that is distinctive in Descartes and Kant. Mr. Veitch's introduction is a most valuable addition to the volume, discussing as it does very fully the relations of Descartes to previous and subsequent speculation. The "Method" is a delightful specimen of mental autobiography. It is the history of the growth of Descartes's opinions, the history of a mind—and such a mind! The second volume gives us the best translation we have of Kant's chief works, at once more complete and accurate than previous attempts. Students may now read Kant and Descartes for themselves, instead of depending upon brief summaries in histories of philosophy, which are inevitably coloured by the opinions of the writers. Both works are capital handbooks on their respective subjects.

MISCELLANEOUS.

RECENT POEMS.

The Truce of God, and Other Poems. By William Stevens. London: C. Kegan Paul and Co. 1879. Gerard's Monument, and Other Poems. By Emily Pfeiffer.

Second Edition. Revised and Enlarged. London:

C. Kegan Paul and Co. 1878.

THERE were, according to M. Taine, certain historians and travellers who came before the British public, in the beginning of this century, under the guise of poets. They wrapped about them the mantle of the bard, but the garb which would best have suited them was of a less pretentious character. In fact, they were not primarily singers at all, and would have found a more fitting employment for their gifts as public lecturers. Now without rudely applying these words to Mr. Stevens, we may, at any rate, say, that in some of its characteristics that book reminds the reader of the poetry-books of sixty or seventy years ago. Not indeed that Mr. Stevens has written a prefatory essay. That fashion seems altogether dead, too dead to be revived by even the most laggard of the followers of the Muses. But there is a certain historical cast in the subjects of his predilection, a certain demand for notes to elucidate the subjects, which are pleasantly suggestive of the literary habits of an elder time.

And just as the critic of a bygone age had no cause to complain when the poet, his contemporary, supplied him with a preface, and thereby saved him from the trouble of painfully elaborating a theory of the poet's art from the poet's verse; so we are perhaps idly grateful for Mr. Stevens's notes. They let us into the secret of his inspiration. We catch, as it were, the falling spark by which his imagination has been kindled; we see him struck by some great event, impressed by some notable moment in the history of mankind, fired by some deed of daring, impressed by some religious truth.—and forthwith his emotion finds vent in verse. Nor are the subjects which have thus had power to move him, unworthy. It was a solemn hush that came over the world, in the year 1000, when all expected that the end was near, and proclaimed the Truce of God. "Kapiolani," the convert queen,

standing by the Hawaiian crater, and defying the volcano-goddess, is a striking and heroic figure, and the surroundings are certainly most seenic. The monk Telemachus finding a martyr's death; his efforts to stay "the last combat in the Coliseum" deserves to live in the memories of men as one who died for the common good. Titian's burial in plague-stricken Venice, Alaric's burial in the river-bed, Lutber's sojourn at the Wartburg, the dreary imprisonment of the Protestant women at "the Tower of Constance," near Aigues-Mortes, in the first half of last century—all these are themes well qualified to awaken a thrill of feeling. The same may be said, in another way, of Professor Tyndall's address to the British Association at Belfast.

All praise to Mr. Stevens for having his emotions roused by such subjects. They are in all senses worthy, and if difficult to transmute into the gold of poetry, so much the more meritorious is the alchemist's daring. Here is a specimen of his skill:

GREAT THINGS AND SMALL

The sunshine flooding all the skies
With radiance paints the smallest flower;
When bare the land all thirsty lies,
The very clods drink in the shower;
The dews that summer nights distil
Rach blade retouch, each petal fill,

The pulsing of the mighty sea.
Uplifts the little fisher boat;
The winds that sweep the grassy lea.
A withered leaf will pluck and float;
And impulse as from heaven may raise.
The weakest voice to notes of praise.

We may not touch the higher art,
And yet may taste the poet-life,
And in its passion have a part,
To prove its bliss or share its strife;
The world's strong pulse throbe through us all
And one life holdeth great and small.

The first two lines of the last verse are at once graceful and modest.

Mrs. Pfeiffer approaches her subjects poetically, has a fair command over the technicalities of verse, and freshness of verbal harmony. Without endorsing all the fine things which earlier reviewers have said of her—as, for instance, the Spectator's declaration, that "her sonnets are . . . among the finest sonnets in the language," which is large praise—we may at least admit that she has a sufficient poetical gift. Gerard's Monument, the story, rather indeterminate as to date, of a woman's life wrecked between her love for her crippled brother and for her husband, is striking and not wanting in power. Throughout the volume

there are passages and single lines which one can extract with pleasure, and remember profitably. Thus we are told of Valery, the heroins of *Gerard's Monument*, who was poor in this world's goods, but wealthy in every grace of soul and person, that

"She prayed as the rich and high should pray, Giving her prayers like alms away."

So, again, how her ancestors, through always unselfishly upholding the better and weaker cause, had

"Come to live in song And die out of their encient place."

And again, when her heart is utterly sundered from her husband, how

"As a star, Removed to coldest depths of space, He yearned towards her from his place In utter loss."

Thus, too, we may quote the first eight lines of the sonnet on music:

- "Nay music, then art young! not long ago Then hadst but rennded to thy perfect form, Thy virginal sweet heart was hardly warm, And little knew of passion or of wee.
- "Now, prescient darling of the world's old age— Born to its gathered wealth, its subtlety, And sadness—thou canst sound the soundless sea, Deeper than line of deepest thought can gauge."

These are good lines, and others might be quoted like them. But Mrs. Pfeiffer, if she will allow us to say so,

" Does not work so earnostly At all times."

And we own to a feeling of some wonder that one who is so able, so evidently cultured, should write so unequally, should commit such poetical mistakes. Words and expressions are the poet's pigments. If he use them without a full appreciation of their relative value, the result is necessarily harsh and offensive. And it so happens that words and expressions, far more than pigments, bear always the marks of the use to which they have been previously subjected. In language that which has once become trivialised can be made noble no more. The old association is ineffaceable. Now in Gerard's Monument, which, be it remembered, though a poem in irregular metre, is a very serious poem indeed of high-pitched medisval life, we are constantly met with

expressions that cause a painful surprise, that are "beneath the dignity of history." Thus we are told how Valery used to "grandly sweep" about her house; how her husband, on one occasion, "spoke his mind,"—quite like the "plain elephant" in Hood's remonstratory ode,—and on another, "scarcely checked a rising oath;" how she found her brother, exhausted by his alchemical labours, lying fainting "in the dead of night," and, a little later, how he "gasps his last;" again, how

"Three ead souls in a morn of May
Had prayed vain prayers each one in his way."

And how one of those souls,

"Maundered again in her dull despair,
Nordreamed that her bleatings went up as prayer."

And how finally—and this is at the climax—when Valery has wandered forth through the snow and night to find her death on her brother's tomb, and is discovered there "stone dead."—

"The wind through boxes and body blew,"

Again, to use the word murky as descriptive of the darkness of the night on which the monks remove her body from the church, unknown to her husband, who has been keeping a crazed watch by it, shows a want of artistic keeping. There is none of the horror of the situation in the expression. The wrong pigment has been used. Nor is it only in the use of words that a want of taste shows itself here and there. Valery's husband had beauty equal to her own. When we are told that he

"Was a man to win A woman in the teeth of sin,"

we scarcely feel that the description is particularly happy. Again, when in the earlier part of the poem we had come across the passage telling how the heroine

"Stepped from out the morning bath
And loft upon the floor a path,
Such as had made her goings known
Wherever barefoot she had flown:
Two alender heels were printed there,
Ten little toes in order fair;
The arch between them had not pressed
The ground, but might be fondly guessed,"

we own to having smiled. What was our amazement when at the sorrowful and bitter end we found the same lines used again for tragic purposes. In the midnight snow at St. Saviour's door

> "Two slender heels were printed there, Ten little toes in order fair; The arch between them had not pressed The shoeted earth, but all was guessed."

Guessed by whom? one feels inclined to ask. The poor distraught husband was the only person present: granting that the light was sufficient, is it to be supposed that he was in a mood to pursue these investigations? Nor is the reader, if the story has produced its intended effect upon him.

We had intended to say somewhat of the few more distinctly religious poems in this volume, and also to the "studies in the exotic forms of verse," "Triolet," "Rondeau," "Rondel," "Villanelle," "Ballade," and "Chant Royal," with which it concludes. But we must stop. And as what we have written may seem too niggard of praise,—we have, in fact, been judging by a very high standard,—Mrs. Pfeiffer shall, by the following quotation, have her last word of protest against us:

TO THE FRIENDS OF LOVE.

All love adepts, all faithful hearts who wear
In love's sweet prime—his hour of blossoming—
The full harmonious colours of his spring,
O think not when they fail ye shall go bare.

Take heart, his very mourning still is fair.

Ay, though the world its hail of pity fling,
Cutting as scorn, no meaner earthlier thing
Can match the royal robe of love's despair!

Put on his weeds, then, ye who fear to aleep Because ye fear to wake to praise new-blown; Rise, bear sweet spices to the grave, and weep Love's balmy tears, there where by Love o'erthrown, Death leaves but empty corements in a heap, And Love for love still rolls away the stone.

SOME RECENT EDITIONS OF POETRY.

Songs and Sonnets of William Shakespeare. Edited by F. T. Palgrave. London: Macmillan and Co. 1879.

The Poetical Works of Robert Burns. Edited from the best Printed and Manuscript Authorities, with Glossarial Index, and a Biographical Memoir. By Alexander Smith. In Two Volumes. London: Macmillan and Co. 1879.

Poems Selected from Percy Bysshe Shelley. With Preface by Richard Garnett. London: C. Kegan Paul and Co. 1880.

Poems of Wordsworth. Chosen and Edited by Matthew Arnold. London: Macmillan and Co. 1879.

It is the age of new editions. If nothing of the highest value is being produced in original poetry, a good deal is at all events being done to preserve, illustrate, elucidate, and popularise such great (and sometimes even such small) poetical work as the past has bequeathed to our less poetic era. The volumes before us are all in their nature "Golden Treasuries;" and it is well that he whose name is so honourably connected with the appropriately christened series that takes to itself that distinction, should have added the Songs and Sonnets of Shakespeare to his other anthologies. The book which gave its name to this series, The Golden Treasury of Songs and Lyrics, still holds its own against all competitors; it is as much a work of art as any piece of mosaic, and it has still a part to play in the delight and edification of old and young. For The Songs and Sonnets of Shakespeare there was far less to do than for the selection from the whole range of English poetry; but what was wanted has been done with taste and discrimination. This Golden Treasury edition of Shakespearian lyrics, however, is not wholly new; in the year 1865 came forth a "Gem Edition of the Songs and Sonnets," an exquisite little square volume, printed on paper of a delicate sage-green tint in the middle, with white margins; and that volume is now reproduced in a style more suited to the general taste. Its intention is to give in one handful all the lyric work of Shakespeare, omitting the two long poems, Venus and Adonis, and The Rape of Lucrece, with a few of the sonnets which through their "warmth of colouring" are rightly deemed "unsuited for the larger audience—compared with that before the Elizabethan muses—which poetry now addresses."

In the edition of Burns named at the head of the present notice, we have, not an importation into the Golden Treasury series, but an exportation out of it. Alexander Smith's two pretty volumes, always acceptable, and among the pleasantest to handle and read of the numerous editions of the great Scottish poet, have been reprinted on fine, hand-made paper, of a size larger than the book as originally issued in the series in 1865. What can one say of such a book beyond what was said fifteen years ago? Had poor Alexander Smith been still among us, he might perchance have found something more to do for the text of his renowned countryman; but as it is, the publishers have done all that could be done in the nature of the case, and put forth one of the most delightful pieces of typography issued for some time past, a veritable édition de luxe. Such editions of such poets it is well to print; well to carry the bright heathery air and stalwart manhood of the Scots peasant into the very stronghold of hyper-

civilisation, the study of the bibliophile.

Mr. Matthew Arnold's Selections from Wordsworth's Poems, is an important addition to the Golden Treasury series, a book full of golden thought and golden song, culled from the mighty mass of work that tells with an ease-loving public against the fame of Wordsworth. For our own part, we find the intellectual giant ever acceptable, ever lovable for the integrity of heart and force of will that led him into his long excursions and preludes. But the warmest of his real lovers will be glad to have, arranged by so loving a disciple as Mr. Arnold, the minor poems of the master. In this selection the somewhat artificial classification of the poet himself is rejected, and the poems are classified in such natural divisions as ballad, narrative, lyrical poems, poems akin to the antique, and odes, sonnets, and reflective and elegiac poems. We cannot admit that all Wordsworth's best work is comprised in the volume; but unquestionably there is admirable choice and arrangement. The Preface is already well known; it is a reprint of Mr. Arnold's article on Wordsworth, contributed last year to Macmillan's Magazine. The poems are not annotated by the editor, and show but little innovation of an editorial kind.

The selection from Shelley bearing the name of Mr. Garnett is not, as that gentleman explains in his preface, a selection made by him; indeed he betrays a decided preference for the selection issued by Messrs. Moxon many years ago as a pocket volume. That earlier volume of so-called Minor Poems (which contained "Epipsychidion," "Alastor," "Adonais," "The Triumph of Life," and other important works) is long since out of print; and this volume, Poems Selected, is in some respects fitted to take its place. It contains much less, however, and is published at nearly twice the price, being an édition de luze, printed on fine hand-made paper, and done up in a parchment cover to match the recently issued edition of Is Memoriam. It is not, however, so pretty a volume as that, its margins being very often scanty in the extreme. The publisher and Mr. Garnett make a mystery as to the origin of the selection; it is stated expressly not to be Mr.

Garnett's, but not a word is said about whose it is. It is in fact a page-for-page reproduction of a volume issued in America by Messrs. Little, Brown, and Co., in 1878 under the title of Minor Poems by Percy Bysshe Shelley. The only omissions are a prefatory note stating that Mr. Buxton Forman's edition has been followed for the text, and a supplementary note explaining that one of that editor's emendatory suggestions has been carried into the text. By the omission of this last note Mr. Forman is left saddled with an innovation in the text which he did not make, but merely suggested in a foot-note as the probable explanation of something apparently wrong; for it is stated in the preface to the English reprint of the American excerpt that Mr. Forman's text is followed throughout. In the American book there is an admirable vignette of Shelley's grave printed in the centre of the title-page, and exactly fitted for that position: in the English reprint the same vignette appears as a "miniature frontispiece," and looks absurdly out of place. The one important bibliographical fact relating to this book is that "The Demon of the World," of which the second part was discovered and deciphered by Mr. Forman is here printed consecutively for the first time in England: in Mr. Forman's edition, owing to the discovery having been made when a portion was already issued, Part I. appeared in one volume and Part II. in another.

CAMERON'S OUR FUTURE HIGHWAY.

Our Future Highway. By Verney Lovett Cameron, C.B., D.C.L. Two Vols. London: Macmillan and Co.

COMMANDER CAMERON is an enthusiastic advocate of the Euphrates Valley Railway. In September, 1878, he set out on a voluntary expedition to explore the most likely route, and these two attractive volumes give the story of his journey from Beirut to Bagdad. He had intended to continue the journey to Bushire on the Persian Gulf; but hearing at Bagdad of the military disasters in South Africa, he hurried home in the hope of obtaining employment at the scene of warfare—a hope not destined to be realised. Mr. Cameron enumerates nine other routes which have been proposed for the projected line, and adds a tenth of his own, which will no doubt be duly canvassed by experts. There is something remarkable in the mere proposal to lead back the traffic between the east and west into the caravan-tracks of long, long centuries ago. It gives one a sort of electric shock even to anticipate a railway station at Baalbek, Hamath, Haran, Mosul, near Nineveh, Bagdad. But people who have lived to see a station on the plain of Bannockburn are prepared to expect anything.

Mr. Cameron seems to consider the proposed line a mere question of time, and perhaps of near time. It may be so, but there are difficulties on the other side. One of these is the necessity of transhipment involved. The Suez Canal was cut for the express purpose of avoiding this difficulty. In the new route it would be restored in full force. Until cargoes could be carried through without disturbance the Cape route held its own. Supposing the new line formed at immense cost, it would only bear the same relation to the Suez route which the latter did to the Cape route, except, of course, that the saving of time would be inconsiderable in comparison. It is very doubtful whether the amount of time saved would be such as to justify the expense and risk.

Again, the line would lie altogether in foreign territory—at least, foreign territory at present. Even supposing that Great Britain should annex Asiatic Turkey bodily, is there any probability of our annexing Persia as well? But unless we did this, in case of certain complications, it is easy to see that the proposed line would be least at our service when we most needed it. A line of such length in such conditions would need an army, or several armies, to protect it. The distance across Egypt was a mere bagatelle in comparison with a line stretchind 1,000 or 1,200 miles. Is the world ever destined to see England and Russia contending on the scenes made memorable by the conflicts of Romans and Parthians? We have no desire to witness such repetitions of history.

In his concluding chapters Mr. Cameron discusses his proposed route with adequate fulness. But to the general reader the chief interest of the volumes will lie in the descriptions of incidents, places, and scenery by the way—hospitable "shaykhs," hunting of gazelles and wild boars, historical reminiscences. Of such matter there is ample store. Only from the occasional mention of "triangulating" do we learn that the traveller and his companion have more serious work in hand. Mr. Cameron's power of observation and interesting description has not failed him. There is rather more of what we suppose is nautical alang than we like. In a book of Eastern travel we may perhaps tolerate talk about a person "levanting," though we have no idea of the origin of the phrase. But what is the meaning of a bottle of wine, "by the side of which a Jeroboam would have been a baby?"

On one subject beside the immediate purpose of the volume Mr. Cameron supplies valuable evidence, viz., the character of the government of Asia Minor, and the condition of the people. As he is a strong opponent of Russian policy in Turkey, believing that "the Russian armies would never have crossed the Pruth if it had not been for the agitation got up by the atrocity-

mongers in England," his evidence is above suspicion. describes only what he saw, and his expressed opinions are strongly anti-Russian. The general result of his observation is that in the wide territories included in Asiatic Turkey government is practically in abeyance, except for purposes of extortion and oppression. The people would be better off left to themselves, because then they would be at liberty, and would soon learn to defend themselves. The Circassians, whom Mr. Cameron compares to the "low Irish of Liverpool and Glasgow," live by violence and rapine. Their presence puts trade and agriculture out of the question, and they are ubiquitous. They turn up at every point of the journey. The Russians may not have done right in expelling them from their dominions, but the people of Turkey would give a great deal to be rid of them. The accounts in the present volumes tally exactly with the accounts given of Circassian doings in European Turkey a short time back. To Circassian robbers are to be added Kurds and Mr. Cameron describes the usual process of road-making to be as follows: - First, enough money is extorted from the people to make a splendid road: then the road is begun and carried on by forced labour; and finally the work is abandoned, and allowed to go to ruin before completion, the traffic proceeding on either side.

At Baalbek our traveller writes: "The telegraph which comes here is almost entirely used for official purposes, for which, in the eyes of the Turks, it is admirably adapted, as in the first place it does away with the bother of letter-writing, and in the second it is such an admirable instrument for blinding those dogs of Giaours. This is the usual way in which the dogs are rendered blind:—Some abuse is reported which demands instant redress; a dispatch is dictated to the central authorities by a European consul or minister, and sent off at once by special messenger to the official implicated, and the ire of the European is appeased. As soon as the Turk is left alone, he offers thanks to Heaven for having enabled him to get rid of the infidel, and telegraphs additional instructions entirely altering the meaning of the dispatch. If any complaint is made, the central authority appeals to the terms of the dispatch, and bewails that it should have been misnnderstood."

At the same place a typical incident occurred to our traveller's party. One of his native servants was the victim of a murderous outrage at the hands of a Kurd zaptieh, or policeman. His injuries consisted of a scalp wound four or five inches long, a gash in the forehead, eyelids split, an eye destroyed, cheek and lips cut open. The worthy zaptieh was duly tried and sentenced to imprisonment. But the keeper of the prison at Damascus was a Kurd and friend, and soon released the scoundrel. By Mr.

Cameron's efforts he was, indeed, rearrested—no doubt soon to be at large again. A better specimen of the zaptieh class at Homs said: "In days gone by there were sultans who cared for the people, and made bridges and roads; now there is no sultan, and he who is called sultan does not care for his people, and eats their money, and makes no roads or bridges; but when the English come that will be all changed, and we shall again have roads and bridges. Inshallah." Mr. Cameron speaks highly of the stuff of the Turkish private soldier, and as poorly of the officers. In one place he came upon a body of troops returning from captivity in Russia. The privates were as wretchedly provided as they well could be. "Two hours afterwards three mounted officers, wrapped up in fur coats, with their private baggage on mules, and an escort on foot, passed by. They had delayed their start till the first rawness of the morning had passed, and they had had a comfortable breakfast. This selfishness of the superior officers in the Turkish army has caused many of the disasters in the Russo-Turkish wars."

Here is a picture of a prison at a town about eighteen miles from Aleppo. "At the serai there was a place of detention which certainly seemed the most peculiar thing of the sort I had ever seen. The lower part of the building was formed of large arches, and one of these was closed at the far end by a wall, and in front by a massive wooden grating. In this place, which much resembled a railway arch, were huddled together prisoners of all ages and religions; some in chains and some free, some sleeping and some awake, some laughing and some weeping. Those who could buy, or had friends who would give them supplies, were well off for tobacco and food, others were almost starved. The more prosperous-looking inmates conversed freely with their friends, and with the friends who stood opposite their cage with loaded muskets ready to fire on any aign of a disturbance. The crimes were as various as the inmates; stabbing, stealing, non-payment of taxes and debt, desertion, and other offences, were mentioned A more scandalous exhibition it was scarcely possible to conceive, if it were not that my eyes and ears were becoming accustomed to what occurs under Turkish rule." Take as a pendant the trial of the zaptieh just mentioned. "A more peculiar trial was never seen; every one gesticulating, shouting, and yelling. The prisoners abused Kamiacan, cadi, court, and everything else, and were abused in turn. The noise went on increasing till it seemed as if the roof were about to fly off. Suddealy there would come a lull, and every one, prisoners, guards, and all, would commence making cigarettes. The ringlesder in the riot coolly took a light from one of the members of the court. After a pause, and with their lungs refreshed by the soothing fumes of tobacco, they would all again burst forth in chorus, and

the noise would be worse than before." "In one place the people out down their olive trees because the amount of taxes exceeded the value of the crop; in another place the headman had built a fine house out of bribes received for allowing people to evade the He described his knavery with much gusto. When men were drawn to serve in the army, he told them to give him amounts according to their means, and then go and hide in out-of-the-way places until the parties sent round to collect the conscripts had gone away, when he would send and give them notice that they might return. When the recruiting officers came he betrayed all these people to them; so they had both to pay and to go as soldiers, whilst he pocketed the money, and also got rid of probable enemies." One Shavkh told Mr. Cameron that he seldom went into Aleppo, because as he was known to be well off he would probably be arrested on some pretended charge and thrown into prison, there to stay till he bribed himself out. Truly, if the British officers appointed to Asia Minor and Syria are to be entrusted with any real power, they will have plenty to do.

In his last chapter Mr. Cameron advocates the most vigorous interference in the internal government of Turkey, and laughs to scorn any consideration for the independence of sultans and pashas. The distinction between the measures which he declares to be absolutely essential to British and Turkish interests alike, and actual annexation, is imperceptible. Indeed, the latter course would be far more feasible, consistent, and effectual. But is Great Britain to make itself responsible for the good government of the whole world? If so, we must forthwith annex Asia, Africa, South America, and, for that matter, Russia as well.

ENGLISH MEN OF LETTERS.

English Men of Letters. "Southey," by Edward Dowden. "Bunyan," by J. A. Froude.

English Men of Letters. "Milton;" by Mark Pattison, B.D. Macmillan & Co.

THE contrast between the former and latter part of Southey's life is very curious. The ardent Republican settled down into the as ardent Tory. Unitarian views, which prevented him entering the Church in accordance with parental wishes, gave way to the most orthodox Anglicanism. The restless wanderer from place to place in England, Wales, and Spain, who joined in a harebrained scheme for emigrating to America, worked in his study at Greta Hall for forty years with the regularity of clock-work. An education the most desultory that mortal man ever received was the forerunner

of one of the purest prose styles in English literature. Southey's career seems to run altogether counter to his friend's dictum, "The child is father to the man." No doubt, it is only in seeming. The present biography scarcely brings out the sequence, but such sequence there must have been. From one or two incidents we infer that quite apart from teachers and schools, that taught him nothing, Southey was carrying on a course of self-education. Thus, we read of his destroying 10,000 verses, keeping as many more, and having 15,000 worthless ones beside. He was expelled from Westminster School for a paper in a school periodical, in which he maintained that flogging was an invention of Satan. Of Oxford, he says: "All I learnt was a little swimming, and a little boating. I never remember to have dreamt of Oxford—a sure proof how little it entered into my moral being." In his earliest years literary instincts showed themselves. That any should be unable to write a play, astonished him. His incessant practice in composition was part of the secret of his perfect style.

By every rule of ordinary experience Southey's life should have been a failure. He married young, without any definite prospect of a profession or a home, leaving his bride on the wedding-day to visit an uncle in Spain. His father was unfortunate in business. But his married life was most happy. The kindness of an uncle and a maiden aunt, and of a college friend who, for reasons not stated in the biography, made him an annual allowance until he had an independent income, saved him from the fate of a Chatterton or Savage. His natural temperament was bright and buoyant. Until later years, when heavy clouds of bereavement and mental affliction settled upon him, he never seems to have known a sorrowful hour. And his cheerfulness of spirit is reflected in his writings. We could wish that these were more in fashion in these days. But admirers of flashy, sensational writers are not likely to take pleasure in Southey's pure, graceful English. Original, indeed, he was not. But the work to which he gave his life is the best of its kind. Mr. Dowden well says: "Let it be praise enough for much of Southey's performance, that he did good work in workmanlike fashion. To shift knowledge into more convenient positions is to render no unimportant service to mankind."

The present life will make Southey better known, but not his works. The biographical element seems to us somewhat overdone. Forty pages are given to details of an education not worth describing, while the description of the writings to which Southey owes his fame is dismissed in ten. There are also passages, as in pp. 4 and 22, which are scarcely in good taste.

Southey's was a typical literary life. His library grew to fourteen thousand volumes. His Spanish and Portuguese collection

was, excepting Heber's, perhaps the largest in private hands. He was well known as a book-hunter all over Europe. "De Quincey called Southey's library his wife; and in a certain sense it was wife and mistress and mother to him. The presence and enjoying of his books was not the sole delight they afforded; there was also the pursuit, the surprisal, the love-making or wooing. And at last, in his hours of weakness, once more a little child, he would walk slowly round his library, looking at his cherished volumes, taking them down mechanically, and when he could no longer read, pressing them to his lips." "It would please you," Southey writes to a friend," to see such a display of literary wealth, which is at once the pride of my eye, and the joy of my heart, and the food of my mind; indeed, more than metaphorically, meat, drink, and clothes for me and mine." "Not a few of the volumes had been cast up from the wreck of family or convent libraries during the Revolution. Yonder Acia Sanctorum belonged to the Capuchins at Ghent. This book of St. Bridget's Revelations, in which not only all the initial letters are illuminated. but every capital throughout the volume was coloured, came from the Carmelite Nunnery at Bruges Here are books from Colbert's library; here others from the Lamoignon one. . . Yonder Chronicle History of King D. Manoel, by Damiam de Goes, and yonder General History of Spain, by Esteban de Garibay, are signed by their respective authors . . . This copy of Casaubon's Epistles was sent to me from Florence by Walter Landor. had perused it carefully, and to that perusal we are indebted for one of the most pleasing of his conversations . . . Here is a book with which Lauderdale amused himself when Cromwell kept him prisoner in Windsor Castle . . . Here I possess these gathered treasures of time, the harvest of many generations, laid up in my garners; and when I go to the window there is the lake, and the circle of the mountains, and the illimitable sky."

The defects of Mr. Froude's biography, such as they seem to us and will seem to many readers, are very different in kind from those of Mr. Dowden's. While the biographical element is not neglected, Bunyan's works are carefully analysed and criticised. The reasons of the different estimate put upon The Holy War and Pilgrim's Progress are clearly and justly indicated. A less known work of Bunyan's, The Life of Mr. Badman, is also described at length. That anything written by Mr. Froude is marked by literary skill and finish, needs only to be stated. The defects arise from the biographer's utter want of sympathy with the religious faith of Bunyan. It is not a question of Bunyan's Calvinism; which, by the way, is made far too prominent in the biography, as though it were identical with Christianity. The defects are goes much deeper. All Mr. Froude's literary skill is taxed to guard against identifying himself with the sentiments

and beliefs he quotes. Sympathy between biographer and subject is surely one of the essentials of a perfect biography. Literary sympathy no doubt there is. Mr. Froude cannot find words too strong to exalt the genius of Bunyan's masterpiece; but this is a very superficial element, and one of which Bunyan himself was unconscious. On this account we should have preferred to see the work in other hands. We do not like to hear Bunyan's allegory praised to the sky on mere sethetic grounds, and then to be told that the substantial truth underlying its imagery, in the faith of which the glorious dreamer lived and died, is not substantial at all. The following are specimens of the way in which Mr. Froude disclaims and condemns the views he describes. "God left him to himself, as he puts it." "He declares that he was without God in the world, and in the sense which he afterwards attached to the word this was probably true." "The conventional phrases of Evangelical Christianity ring untrue in a modern ear like a cracked bell. We have grown so accustomed to them as a cant, that we can hardly believe that they ever stood for sincere convictions." "He was torturing himself with illusions. most remorseless philosopher can hardly refuse a certain admiration for this poor, uneducated village lad, struggling so bravely in the theological spider's web." "The fierce inferences of Puritan theology are no longer credible to us; yet nobler men than the Puritans are not to be found in all English history." Compare the two following passages. "The religion of the Pilgrim's Progress is the religion which must be always and everywhere, as long as man believes that he has a soul and is responsible for his actions." "Bunyan's answer has served average English men and women for two hundred years, but no human being with Bunyan's intellect and Bunyan's sincerity can again use similar language." Mr. Froude surely "believes that he has a soul and is responsible for his actions." Mr. Froude does not think that Bunyan, before his conversion, was as wicked as some of his language seems to imply. There is something to be said for the opinion that his descriptions are coloured by his subsequent Mr. Froude also more suo defends the civil experience. authorities in respect of Bunyan's trial and imprisonment. We hope, however, that it is the administration of the law rather than the law itself that he wishes to justify. He throws doubt on all accounts of Bunyan's hardships and privations in prison, and with great ingenuity represents such sufferings, if there were any, as "intensely discreditable to the Baptist community." According to such modes of defence it would not be difficult to show that there never was such a thing as religious tyranny and persecution, that Puritans did very wrong in complaining of imprisonment, fine, confiscation, and exile, and that the real sufferers have been Stuart legislators and judges. On these principles the expulsion of the

Stuarts from England looks very much like a phenomenon without a cause.

There is no one in England more competent to do justice to the intellectual side of Milton's life than Mr. Pattison, and in the present work he has done justice to it, as far as space will allow. Writing from full and intimate knowledge of the age, he is able to present Milton's life in connection with all its antecedents and surroundings. The poet's lifelong passion for study, the purity and loftiness of his aims, the lonely grandeur of his character, are well illustrated. We do not remember to have seen it brought out so clearly before that Milton's epic was the outcome of a purpose early formed and never forgotten, to write some work that the world would not willingly let die. The execution of the purpose was delayed by the official work to which he gave the twenty years of his prime and even sacrificed his sight. But those years were not lost for his crowning work. All the time he never ceased to be the laborious student, garnering and brooding over the wisdom of ages. Hence the wealth of learning with which his pages are crowded. Like the true scholar he was, Milton did not carry his learning outside as a burden. He made it thoroughly his own, interweaving it with the woof of his own thoughts. Mr. Pattison well says: "The style of Paradise Lost is only the natural expression of a soul exquisitely nourished upon the best thoughts and finest words of all ages. It is the language of one who lives in the companionship of the great and the wise of past times. It is inevitable that when such a one speaks, his tones, his accent, the melodies of his rhythm, the inner harmonies of his limited thoughts, the grace of his allusive touch, should escape the common ear. 'Te quoque dignum finge Deo.' The many cannot see it, and complain that the poet is too learned. They would have Milton talk like Bunyan or William Cobbett. whom they understand . . . An appreciation of Milton is the last reward of consummated scholarship." Milton's lighter pieces, which alone would suffice to place him in the front rank, stand at the commencement of his career, his epics at the close. The years between were filled with public work, which Mr. Pattison evidently regards as a waste of strength. We are not without instances in our own days of transcendent gifts devoted to the public service. Milton's willingness to do such work proves at least the ardour of his devotion to the Republican cause, and in that devotion he never wavered. Mr. Pattison's want of sympathy with Puritans and Puritan ways unfits him for doing justice to this side of Milton's life. He speaks of "human studies" being "swamped in a biblical brawl," and of "the petty chicanery of Calvin's Institutes." The Rector of Lincoln College, Oxford, is also of opinion that "divinity, which is made to live, necessarily becomes unorthodox." With other opinions of his we can agree,

as where he says: "No good man can, with impunity, addict himself to party. And the best men will suffer most, because their conviction of the goodness of their cause is deeper." In such a master of pure English as Mr. Pattison, words and phrases like the following are somewhat strange: "Dubitative, battailous, canticles, pudicity, instaurator, onfall, ingestion, prosaist, incivism, literary digladiations."

HOUSTOUN'S TWENTY YEARS IN THE WILD WEST.

Twenty Years in the Wild West; or, Life in Connaught. By Mrs. Houstoun, Author of "A Yacht Voyage to Texas." Murray.

OUR first feeling on reading this book was indignant sorrow that it should ever have been written; our next was wonder that Mrs. Houstoun should have allowed her judgment to be so plainly warped by her surroundings. They were not cheering; she almost always had bad weather, and her introduction to her mountain home, amid the pelting rain of a pitiless November storm, was enough to depress the stoutest heart. The climate undoubtedly affected her liver: we do not apologise for saying this of a lady writer; one who writes as Mrs. Houstoun does puts herself outside the pale of gallantry. Indigestion, she says, is the common malady in West Mayo; and some form of it made her look on everything with jaundiced eyes. She was wholly cut off from society; and. moreover, she permanently injured her knees by a fall from the bench of a hookah (as she calls the hooker, or country boat). She says she went with rather favourable notions about the Irish; she liked those whom she had met in America; yet she contradicts herself by stating that as for gratitude she never expected to find that amongst Irish people. Everything animate and inanimate (except the gloriously lovely scenes of Clew Bay) comes in for her reprobation. She talks of "the hideous description of architecture peculiar to Irish castles;" of "black-vieaged priests; I never chanced to see a light complexioned one;" of "an Irish, i.e., animal mouth;" of "the deluded Celt plied with whisky by his priest." The priests are her bêtes noires; they cause all the evils except what are due to absenteeism and the climate and the Celtic character; they denounced her husband from the altar-at the same time she believes it was through them that he escaped being shot; they frustrate justice by forbidding the innocent to inform against the guilty. But the Protestant missioners she finds just as bad. They are violent, ill-bred, eager to insult and outrage the feelings of those whom they are sent to proselytise. What good can come of calling the cross "a blasphemous emblem," and speaking of the Virgin Mary as "a sinful, unrighteous woman,"

and consigning Romanists, individually and collectively, as liars and idolaters, to everlasting burnings! We quite agree with Mrs. Houstoun in disbelieving in any case of an adult Papist having conscientiously "jumped" (come over to Protestantism). We also agree with her that the decay of fisheries on the West Coast is mainly due to the non-arrival, nowadays, of the fish themselves. We agree with her that the rents on small holdings are usually exorbitant; and that "the proportion of landowners who, from selfishness and lack of patriotism, live away from and spend their incomes out of the country, is very large . . . very few landlords practically evincing the slightest inclination to sojourn on their estates." We agree with her in execrating the brutal cynicism of some Irish guardians with big rent-rolls, and the high-handed lawlessness with which a landlord will actually fine a tenant five shillings when he suspects him of telling a lie. As a Union doctor (who, by the way, talks a most wonderful lingo) told her: "The landlords can't get over the feeling that the poor are as much beneath them as the dirt, and to be as aisily trodden down. They have an idea that because the land is theirs they are a kind o' kings." But on almost every other point we wholly differ with Speaking of the old famine, for instance, she says: "that the landlords had done their utmost for the people's present relief and eventual benefit there can be no doubt." Some landlords, we know, ruined themselves in the effort; but Mrs. Houstoun ought to be aware that so badly did the majority in the most afflicted parts do the duty, so wretched and total was their break down. that no less than thirty-three Irish Unions (out of 130) were dissolved (their guardians being the big rent-roll men of whom the Union doctor spoke) and paid guardians appointed in their places. But there is no use in exposing the mistakes and self-contradictions and hasty generalisations of one who expected fruit to ripen in West Mayo, and who stigmatises the tardy justice of Mr. Gladstone's Irish Church Act as the cause of a great increase of Ribandism and Fenianism. Her generalisations would be amusing but for the mischief they are likely to do with those who know nothing of the country. Because some lubberly fellow, who has given himself dyspepsia by gorging potatoes "with a bone in them." howls shamelessly under the infliction of a mustard plaster. therefore the Western Irish are set down as cowardly beyond conception in anything like sickness. They are not greater cowards (on her own showing) than the awkward English guest who, having badly hurt his hand while shooting, is frantically anxious to keep Dr. Rynd away from all his patients, roaring out: "Ten thousand pounds, if he stays. If I go to Dublin with him now, I shall die-I know I shall-upon the road." But worse than her hasty generalisation is her yielding to that curse of bookmakers, the temptation to turn everybody (oneself included) inside out for

the benefit of the public. For instance, an old priest calls for a subscription; the weather is "frightful, the wind driving perfect sheets of rain against the panes." He has a long ride before him, and asks for "a dhrop o' sperits in a spare flask to keep the could out." "Very much a contre cour" they invite him to stay the night; but an invitation so given is naturally not accepted, and he rides off with the whiskey. This story, meant to tell against the priest, "a rather decided inebriate," surely tells most against those who could publish it. We have no wish to defend the Mayo priests against Mrs. Houstoun's accusations, though we would remind her that there are black sheep in every flock, and that many of the Moderates of the Kirk, as described in Dr. Duff's life, were far worse than even her "Father Pat." Still less do we wish to excuse the practice of denouncing at the altar; but there is a wide difference between a denunciation and a political sermon. From her quotations we should judge "Father Pat's" discourse to have been the latter. It might have had for its text those lines which Mr. John Bright once wrote in the visitor's book of a Highland inn.

> "Glen Onlart seems to me a nobler glen; Here deer and sheep have not supplanted men."

The priest saw a "Scotch adventurer" coming in and covering ninety square miles with flocks and herds, while the people were dying off like the rotten tubers which mocked their labour. He probably knew enough of Irish history to be aware that such immigration had always worked in one way, viz., to disposeess and cast adrift more and more of the old inhabitants. That the incomer was there at all was due to an awful visitation of which many landowners had taken advantage to clear their properties. The result of his success, judged by past experience, would be to bring other speculators, for whom further clearances would be made. Priest and peasant may be very unwise in resisting depopulation. It may be a blessing to the Mayo cottier and his family to be swept into the purlieus of Seven Dials (they still exist, despite all the pulling down), or the Liverpool cellars, or the tenement houses of New York; but so long as he is stubbornly attached to the soil he will hate with an unreasoning hatred all whom he looks on as accessories to eviction. Not unreasoning only but most unreasonable is the feeling which looks on English people in general as sharing in the sin which really lies at the door of his own landlords. Yet there is plenty of excuse for him; as there is for the Polynesian who, having had his village fired out of sport by some passing ship's crew, revenges the deed on the next white men who come in his way. The Irishman knows that, but for the evictions, the cattle farmer would not come; he therefore argues that if the cattle farmers were not ready to come, the evictions would not take place. There is something in the priest's plea," that God's human creatures might have their rights again."

Mrs. Houstoun seems kindly enough in her way, though her behaviour at the Westport Hotel, where she would not even have taken a cup of tea had not the tide made delay inevitable, shows that she was not the woman for Mayo. She made friends with Sister Mary Ignatius, the superior of Westport Nunnery; she conscientiously doctored all who came for advice; and, till Archbishop MacHale forbade it, she had their children taught at the school that she had opened for the families of her husband's Scotch shepherds; but she seems to wholly lack that power of putting oneself in another's place on which true sympathy depends.

Captain Houstoun appears to have done well with his stock in spite of his being "as ignorant as a child of the business," and suffering for his ignorance. His wife talks of 23,000 of his sheep and cattle more than Job's. His rent, too, was temptingly low. In fact, he did what he went to do; and she surely might have been content without pouring out upon everything Irish the querulousness of a mind soured by twenty years of a life to which no lady of ordinary bringing up ought to have been subjected. We deeply regret the publication of her book. That the publishers should have allowed the sensation picture on the cover—Pat behind a wood-paling pointing a pistol at a gentleman driving by—shows how strangely careless men too often are of the results of what they thoughtlessly allow. We hope Mrs. Houstoun's book will not be much read in the district it treats of.

MARSHALL'S ECONOMICS OF INDUSTRY.

The Economics of Industry. By Alfred Marshall, Principal of University College, Bristol, and Mary Paley Marshall, late Lecturer at Newnham Hall, Cambridge. London: Macmillan. 1879.

BOTH the authors and publishers of this volume must be congratulated on the result of their labour. "Many thoughts of many minds" are so skilfully blended with much that is new, as to leave no impression of patchwork on the reader's mind. Each chapter gives a finished picture of the subject with which it deals. The matter is well digested, clearly stated, and scientifically handled. As most of the terms used in Economics have a popular as well as a scientific signification, "words used in a technical sense are" most judiciously "printed with capital initial letters," and all terms or expressions when defined are indicated by a larger black type. "A few discussions are included in square brackets, to show that they should be omitted by beginners in the first time of reading." The authors put only a just estimate on their work. As interest carries one through it more quickly than

is consistent with critical examination, a second thoughtful perusal is as necessary as it is thoroughly merited. Indeed, as a scientific treatise, we think it will take rank with the justly popular model text-books of Huxley, Boscoe, Stewart, &c., brought

out by the same publishers.

Unlike many other sciences, Recommics, or Political Economy, has a practical interest for all men: for the man of business, for landlord and tenant, for employer and employed, and for the would-be philanthropist a knowledge of its laws is indispensable, if their wealth, whether personal or material, is to be used in the most profitable manner. In this volume—to be followed by a companion on the Economics of Trade and Finance—we find ably discussed such topics as the "Growth of Capital," "Division of Labour," "Tenure of Land," "Laws of Demand and Supply," "Rent," "Changes in the Purchasing Power of Money," "Trade Unions," "Arbitration," &c.

Let us illustrate the character of the work by a few extracts from Chapter V., on the Growth of Population and Poor Laws. In the preceding chapter the authors have been dealing with the law of fertility of land, or "Diminishing return," which reads thus: "After a certain amount of capital has been applied to Land, every increase in produce is obtained by a more than proportionate increase of capital; unless the arts of agriculture are

meanwhile improved."—Page 22.

"The Law of Diminishing Return tells us that when population has reached a certain density, an additional amount of labour and capital will not raise a proportionately increased supply of food. The operation of this Law is delayed by the progress of the arts of agriculture and manufacture, and by bringing freeh land under cultivation. It is possible that when the whole world is well cultivated, it may afford support for five or even ten times as many people as there are acres in the earth's surface. But a limit to the growth of population must be reached at last. The surface of the globe, including sea and land, is about 600,000.000.000.000 square yards. If we suppose that each yard allows standing room for four persons, this calculation gives room for 2,400,000,000,000,000 persons. Next, looking at the rate of increase of the population of England and Wales, we find that it doubled between the years 1801 and 1851. . . . At this rate the descendants of a single pair would in 3,000 years form a solid column covering the surface of the globe more than eight hundred deep."—Page 27.

As man has existed on the earth certainly for more than twice this period, it is evident that a most important part in the history of the human species is played by the positive checks to growth of population. War and famine, disease and pestilence, have, in very truth, slain their millions. Though the question of superabundant increase, owing to the large tracts of land yet uncultivated, has not

become a general one, yet it may arise in connection with individual nations occupying limited territories. As a people prospers its numbers increase. The Law of Population states that "a rise in the rate of wages causes either a rise in the standard of comfort of the people, or an increase in the number of marriages and births. A rise in the standard of comfort is almost sure to increase the percentage of children who grow up to be efficient workers. Therefore a rise in wages almost always increases, and a fall in wages almost always diminishes the rate of growth of population."—P. 29.

At present we have to aim at abolishing positive rather than raising preventive checks to population. In reference to this

question we find the following sensible remarks:

"Malthus' statements with regard to the misery that has existed in past ages, have been fully confirmed by more recent historians; but the practical conclusions that he deduced from them are more liable to be disputed. For he could not foresee the inventions and discoveries which were just about to be made when he wrote. He could not foresee how the growth of steam traffic would enable England, on the one hand, to import food from countries where there was a scanty population; and on the other to send out her surplus population to cultivate new soils, and to spread the energy and genius of the English people over the earth.

"There can be no doubt that this extension of the English has been a benefit to the world. A check to the growth of population would do great harm if it affected only the more intelligent races, and particularly the more intelligent classes of these races. There does indeed appear some danger of this evil. For instance if the lower classes of Englishmen multiply more rapidly than those which are morally and physically superior, not only will the population of England deteriorate, but also that part of the population of America and Australia which descends from Englishmen will be less intelligent than it otherwise would be. Again, if, Englishmen multiply less rapidly than the Chinese, this spiritless race will overrun portions of the earth that otherwise would have been peopled by English vigour.

"It must be remembered that the growth of population depends not on the number of those who are born, but on the number of those who grow up to maturity; that infant mortality is the natural consequence of improvident marriages; and that the character of the population of a country will be lowered if people marry early on insufficient means, and have families so large that, though they can just rear them, they cannot properly care for

their physical, moral, and mental education.

"The best practical answer to the question which we have set ourselves to discuss in this chapter, seems to be:

"Just as a man who has borrowed money is bound to pay it back with interest, so a man is bound to give his children an education better and more thorough than he has himself received. When people are in a position to do this, they confer a benefit on the State by marrying. This practical principle measures equitably the same measure of public duty to rich and to poor. Its general adoption would cause the spectre of Malthusianism, which casts a gloom over economic speculation, to disappear, or at any rate to be no longer dreaded; and would rid us of the competition for food, which seems to day the heels of progress" (81-82). have quoted too fully from the first part of this chapter to allow much reference to the second. It deals with a most difficult subject. How to reach and how to treat the poor, is a question of growing importance. There can be no doubt that indiscriminate alms-giving, however merciful in appearance, is calculated to increase mendicancy, and therefore decidedly reprehensible. But are we therefore to give up out-door relief and fall back on the workhouse test. "There are some who think that every change in the poor-law should aim at the ultimate abolition of out-door ralief. But the deserving poor feel, and ought to feel, great anguish when they are forced into the workhouse. When a man has not undertaken the responsibilities of marriage without a fair chance of being able to provide for his children, when he has led a hard-working, unselfish life, and has saved to the utmost of his power, but has been weighed down by accumulated minfortunes; every hardship that is imposed on him needlessly, is an unjustifiable cruelty. It is true that the abuses of out-door relief are at present so great, that it should be abolished if they could not be diminished. But it has not been proved that it is impossible to separate the deserving from the undeserving poor." We quite agree with this statement, and recommend to the notice of those desirous to work for the poor Miss Octavia Hill's work, Homes of the London Poor, from which the anthors of this volume quote. Such an organised volunteer relief hand, as is therein advocated, seems, under present circumstances, the best method of compassing this most desired end.

We hope the authors will adopt the same style and arrangement in their forthcoming volume as they have adopted in this. Then no doubt it will meet with as favourable a reception as we anti-

cipate for The Economics of Industry.

BAKER'S CYPRUS IN 1879.

Cyprus, as I saw it in 1879. By Sir Samuel White Baker, M.A., F.R.S., &c., Author of "Ismailia," "The Albert N'yanza," "Eight Years in Ceylon," &c., &c. London: Macmillan and Co. 1879.

SIR S. BAKER claims to have examined Cyprus in every district, and to have tested climate and geographical peculiarities in spring, summer, and winter. We need say the less about his book, because a year ago an article in this Review was devoted to the island, and all the books named by Sir S. Baker were noticed, except that compiled for the Intelligence Branch, by Captain Savile, of the 18th Royal Irish Regiment.

Our author thinks the Turks had the best of the bargain. If we were to take Cyprus at all, we should have taken it wholly, not with that saving clause as to evacuating it when Russia gives up Kars and Batoum, which, wildly remote chance as it is, will pre-

vent the investment of British capital in the island.

Its strategic value is sufficiently proved by the way in which, ever since the dawn of history, it has been battled for by so many powers. Like most visitors, Sir S. Baker was struck with the desolate aspect of the country round Larnaca-" bare hills that looked as if the snow had just fallen on them." This is owing to the reckless cutting down of forests. Cyprus, which in early classical times was one of the best wooded countries in the world. is now so frightfully denuded that the houses have been built upon arches because of the scarcity of wood. Our author returns more than once to this subject. Cyprus must have a forest staff; despite the new regulations, in outlying places a peasant who wants a pig trough fells a whole tree for the purpose, and, having cut out the heart, leaves the rest to rot. Other trees are felled to get tar. To get a straight pole a large pine is felled, and the pointed top is cut off, the rest being left on the ground. A forest in Cyprus is a pitiable sight, making one fancy an enemy had passed by with the determination to utterly ruin everything in the land. This wholesale destruction has seriously altered the climate, causing alternate droughts and floods, and seriously increasing the heat, for "trees act like an umbrella in keeping off the sun's rays."

The partial unhealthiness our author attributes (like most other writers) to the formation of swamps, the outlets of rivers having got silted up. It is unlucky that our troops were set down, in July, on some of the worst spots in the island, and with appliances wholly unfit for the climate. No doubt Cyprus is hot in the plains; but hill-stations may be chosen; most of the monasteries are fixed in such positions. Along the northern slopes of the

Carpus range Sir S. Baker found the climate delightful. Consumption is unknown, and the island will by-and-by become the resort of delicate persons fleeing an English winter and spring. Provisions are cheap; mutton about 3d. per lb., fowls 1s. each; eggs from twenty-four to thirty for ls. Grapes are very fine, equal to the best English hothouse produce, the cost being about 1d. per lb. Wine will surely be the great staple, though the silk is perhaps the best in the world, and the honey excellent. Limasol, our author predicts, will from its geographical advantages become the capital; the neighbourhood is healthy, and Sir Samuel looks forward to the time when it will be studded with villas to be rented for the cool season. Of the courtesy of the people he speaks in high terms; they did not even scoff at the extraordinary gipsy-caravan which he brought over in order to supersede hotels, and which, being too large for the streets of Larnaca, "resembled, after it had gone down Wolseley Street, a ship that had been in bad weather and in collision with a few steamers." The Greek Church holidays one or two every week-have tended to kill out energy; nevertheless, vegetables are grown in great quantities, and, with the useful little native plough, that will turn at any angle and in any space, little corners of valleys are tilled which in England would, perforce, be left in a wild state. The native mode of irrigation by connecting chains of wells from different springs converging on a main channel or subterranean tunnel is curious and useful, and Sir Samuel says it should be strenuously encouraged: "it is a common fault among English people to ignore the value of native methods, and to substitute some costly machinery which requires skilled labour and expense in working." This is what Mr. Hamilton Lang did while engaged in farming. Not content with the clumsy instrument, a piece of heavy planking studded with flintsthe classical tribulum—which at once thrashed out the corn and cut the straw up in lengths for the oxen to eat, he sent to some of our great agricultural implement makers and got a machine which was to do the work without the help of oxen in a proper English way. Unfortunately the oxen would not touch the straw cut up by the new machine; and Mr. Lang must have felt relieved when it went hopelessly out of order.

Sir Samuel's most interesting chapter is that which describes the monastery of Trooditissa, the road to which lay through delightful forest scenery. The monastery is 4,340 feet above the sea; but the cool mountain air had not made the monks industrious. "We began by cleansing, and I should like to have engaged Hercules, at the maximum of agricultural wages, to have cleansed the long line of unclean stables; the Augean were a joke to them. . . The monks had filthy habits; it would have been impossible for civilised people to have existed in this accumulation of impurities." Sir Samuel set the monastery students to

work at la a day, and inspired the whole company with such a spirit of industry that "never in the history of the monastery could there have been such a stirring picture, and such a dust as we made in cleansing and alterations." With the docks six feet high he thatched his summer-house (writing shed); and the energy and helpfulness of the embryo monks were so exemplary. that our author recommends "all young curates who are waiting in vain for livings to come and work at Trooditises for 1s. a day. The wholesome diet-broad beans and barley bread, with innumerable fasting days, will be useful, and will make them feel that £800 a year, with a wife and large family in England would not confer the same happiness as work and independence and the absence of temptation—garden parties, balls, picnics, and all such snares of the evil one-among these Greek monks." The physique of the monks was splendid; their only indulgance being the commanderia wine, of which some of them took a good deal too much. Mrs. Scott Stevenson, whose lively book should be read along with Sir S. Baker's, hints that female inmates are not wholly wanting in these monasteries. Female visitors are very common at Trooditiesa; for there is a holy image of the Virgin, which, discovered by a miracle, has since been an object of pilgrimage for women far and near. It is the old Venus worship over again.

There is a vast amount of information in this book; but we cannot praise the style. It aims at being lively, but without success. The best remark, perhaps, is that the Cypriotes, "who had expected to see England and the English as their rulers, might have 'scratched an Englishman and found the Turk,' when it turned out that by the conditions of occupation we are bound

to maintain the existing regime."

FREEMAN'S HISTORICAL ESSAYS.

Historical Essays. By Edward A. Freeman, M.A., Hon. D.C.L., and LL.D., late Fellow of Trinity College, Oxford, Hon. Mem. of the Imperial University, of St. Petersburg. Third Series. London: Macmillan and Co.

MR. FREEMAN'S manner, and the tendency of his mind, are so well known, that when his subject is named most of us can form some idea of how he will treat it. In this volume the range of topics is very wide, including "First Impressions of Rome and Athena," reprinted from the International Review; "The Illyrian Emperors and their Land, with an appendix on Diocletian's Place in Architectural History;" "Augusta Treverorum," "The Southern Sclaves," and several other reprints from the British Quarterly; "Medisaval and Modern Greece," made up of three papers which appeared in

the Edinburgh, the National, and the British Quarterly; and "Race and Language," a reprint from the Contemporary, Fortnightly, and Saturday Reviews. On all these subjects he has given us carefullyfinished monographs, the series being meant (he says) to illustrate some periods of history which lie between those illustrated in the two earlier series. The first series dealt with comparatively modern times, the earliest Continental subject treated of being "Frederick the First, King of Italy"-i.e., Barbarossa looked at in his specially Italian character. The second belonged to the time when political life was confined to the two great Mediterranean peninsulas, and when the Teutonic and Slavonic races had as yet hardly shown themselves on the field of history. This newest series, then, is intended to support Mr. Freeman's favourite doctrine of the continuity of history, and especially of the longabiding life of the Roman Empire, eastern and western. divides this volume into three groups—the first dealing with the Roman power in the west: the next with South-Eastern Europe. and with the later history of Greece as a part thereof. "Here in the East of Europe," as he says, "the intermediate period comes down to our own day. The various races still abide side by aide; the process of fusion, so characteristic of the West, has been applied in a very slight degree." This group is therefore introduced by the very interesting essay on "Race and Language." The third group consists of "The Normans at Palermo" and "Sicilian Cycles," and insists on the true historic character of Sicily, "first, as, what its geographical position made it, the general meeting-place of all the nations round the Mediterranean; secondly, as, in its later shape, one of the states carved out of the Eastern Roman Empire. The history of Sicily is wholly misunderstood if it is taken, as it often is, for merely part of the history of Italy." Rome, Ravenna, and Trier (as Mr. Freeman will call Treves) had been already treated of as imperial dwelling places in the "Historical and Architectural Sketches" reprinted from the Saturday Review; but there is no repetition; "the essays are for the library—the sketches will be of most use on the spot." The essays on South-eastern Europe needed considerable alteration; even that on the Southern Sclaves, written as late as 1877. Mr. Freeman's pity is specially lavished on Illyricum, which, under the pas Romana, became, from a nest of pirates and brigands, one of the most flourishing regions of the world. This prosperity lasted on to the Avar and Slavonic inroads. "Till that time the body and its mouths were united; the great mainland, watered by the tributaries of the Danube, had its natural outlet in the Dalmatian havens. Never, in all the tossings to and fro from one master to another, have these lands been again what they were from Augustus to Justinian. . . The Montenegrins with their perfect independence, the men of

the Bocche, under civilised but still alien rule, the men of Herzegovina in their barbarian bondage, are parted from each other by nothing but the merest political accident... This is the extreme point of unnatural disunion; and the cuckoo cry about the integrity of the Ottoman Empire means, among the other evil things that it means, the continuance of this disunion." To reconstruct Illyricum, Mr. Freeman would take not only from Turkey, but from Austria. Cattaro, twice filched by Austria, once from Venice, once from the Montenegrins, "the old Dekatera of Constantine, the whole shore of that lovely gulf, and thevaliant men who dwell upon it, must be again joined to the dominion of Nicholas of Cettinie."

Of the Bulgarians, Mr. Freeman's view differs from that usually taken. Most people deem them Turanians Sclavonised by fusion with a remnant of conquered Sclaves and by the influence of their Sclave neighbours; our author takes them to be Sclaves who have been brought under a certain measure of Turanian influence, and who have taken the name of their Turanian masters as the Gauls have taken the name of the Franks. We hope this is not so; for the Bulgarian character is, by all accounts (except Mr. Freeman's), so detestable, that we would rather not think of them as kinsmen of Servians and such like. Anyhow, Great Bulgaria, the home of the invaders who at least gave their name to the present country, is on the Volga, and gives one of his

innumerable titles to the Russian Czar.

To our thinking the most interesting of all these essays is that on race and language. It characterises (what we have always held) that language is by no means a test of race, some races having a facility for losing their own speech, as the Normans did in France, and the Northmen in the Western Isles of Scotland. The modern Frenchman he defines as "due to the union of blood which is mainly Celtic with a speech which is mainly Latin, and with an historical polity which is mainly Teutonic. "And this new national type has assimilated all others, so as to make everything else exceptional, like the Fleming in one corner, the Basque in the other, the far more important Breton of a third corner." This assimilation is a different thing from mere political good feeling. "It is partly because Ireland has great wrongs, partly because it is a separate island, and not so much from distinctions of race, that the unhappy division arises. In point of language the discontented part of the United Kingdom is much less strongly marked off than that portion of the contented part which is not thoroughly assimilated. Irish is not the language of Ireland to the same extent that Welsh is the language of Wales. The Saxon has to be denounced in Saxon speech." The parallel between Ireland and Sicily is drawn out very interestingly in Sicilian Cycles. The silver thread has a great

deal to do with the differences between these two parts of the United Kingdom. Yet Ireland never could be linked to France or to the United States in the same intimate way in

which it is joined to England.

We recommend the opening pages of this essay as full of special instruction for the present time. But the whole book is well worthy of its anthor's reputation. We wish, however, he would be a little less unfair to the Turks. It is unpleasant to find a first-rate writer so blinded by prejudice that he cannot see the good points of those who have in recent years suffered foul wrong and grievous misery.

ADAMS'S WOMAN'S WORK AND WORTH.

Woman's Work and Worth. W. H. Davenport Adams. London: John Hogg.

In little more than 500 pages, Mr. Adams has undertaken to consider woman "as mother, wife, maiden, as sister, daughter, friend, as heroine, enthusiast, and social reformer;" he has reviewed her position in the world of letters and of art, in all times and countries, the past and present state of her education, the means now afforded to her of carrying it on, and the various employments and professions open to her; he has added hints on self-culture, illustrations of woman's character, duties, rights, position, influence, responsibilties from fiction as well as history, and an abundance of quotations drawn chiefly from familiar sources. It is matter for great wonder that the reverent appreciation he professes to have for women has not led him to do justice to his subject, by limiting himself to a portion of it sufficiently small to receive careful and thorough treatment. Having undertaken a hopeless task, his work is necessarily superficial and incomplete. He has collected a great number of facts; but they are arranged badly, with a curious disregard of their comparative importance, and narrated in a style that is ineffective and fatally fluent. But the most serious defect of the book is the comparatively alight treatment of the moral and spiritual side of "woman's work and worth." Bent on establishing her intellectual claims, he has forgotten that were her mind cultivated to its utmost extent, and every barrier thrown down that now limits her sphere of action, her highest value would still be as a moral agent, and her glory, the work she does from love to God and man.

The first part of the book—consisting chiefly of anecdotes, quotations, and reflections about the value of mothers, wives, and maidens—retraces familiar ground, and while, like other works of the same class, it has points of interest, is on the whole fragmentary and unsatisfactory. The chapter on women of letters

might have been valuable had its confused list of writers been properly classified and more complete, and its literary criticisms more discerning. Mr. Adams sets a value upon the works of Miss George and Miss Sewell, which is surprising, when we remember the inartistic and morbid novels of one, the tame and feeble stories of the other, and the exclusive religious sympathies He expresses approbation of Rhoda Broughton and Ouida, and criticises George Sand with a leniency especially objectionable in a book meant for the guidance of young girls, and his omissions are equally surprising. Mrs. Stowe is dismissed with a mere allusion to *Uncle Tom*, her other works quite ignored. We have searched in vain for any mention of the Schönberg Cotta series, and though so many women have found a congenial field in writing for children, their fruitful labours there are scarcely heeded. Miss Wetherall. "A. L. O. E." whose tales however unreal, contain much good teaching, and are so widely read are passed over with many others; and Hesba Stretton, chief favourite among little ones, and Mrs. Ewing, whose writings for them are so truthful and fascinating, are only mentioned incidentally.

The chapter devoted to woman "as heroine, enthusiast, and social reformer" is miserably deficient. A long and beautiful story might be told of the work of Christian women in all ages, beginning with those who ministered of their substance to Christ, and never fuller or brighter than now, when all ranks have united to do good, from the princess whose memory is dear to the people of her birth and her adoption for the sake of her ministry to the sick, to the Bible women who devote their lives to relieving a wretchedness once their own. But there are scanty glimpses of it here. We would gladly have found some account of the social reforms women have attempted and achieved, and of the different modes of work their philanthropy has devised; but the few instances given are isolated, demanding no imitation. Half a dozen pages are given to Joan of Arc, and nothing told of the heroines of the mission field, whose sober zeal has wrought wonders there for the kingdom not of this world. We have the history that needs no telling of Angelique Arnaud, Miss Nightingale, and Sarah Martin; but the work of Miss Agnes Jones, Miss Florence Lees and her Nurses' Association, Miss Robinson and Miss Weston, who have done so much for soldiers and sailors, Miss Hill, Lady Hope, Mrs. Ranyard's Bible Mission, the Ladies' Sanitary Association, and much else besides, receives no notice.

An account of the work now being done by women would have been inspiriting and suggestive to others; but the book is weakest where it should have been strongest. Its best, most useful portion, is that which gives information respecting the course of study pursued at the different colleges for women, and the examinations and scholarships open to them. In a pamphlet form it would be a convenient guide to any who were at a loss to decide the best place for carrying on the higher branches of study.

Very interesting, also, is the account of the Society for Promoting the Employment of Women. The value of an institution that diverts their labour from the profession of teaching—painfully overcrowded as it is—and fits and trains them for a great variety of occupations, is inestimable. It is scarcely to be credited that the whole of England contributes little more than £200 a year to its support. It has done a great deal to prove to women that their quickness of instinct in no wise supplies the place of an apprenticeship, and that they must submit to drudgery before becoming independent. On the other hand, it has proved to all that the marked inferiority in their work shown when they first entered into competition with men in type-setting, telegraphy, book-keeping, and other arts, rapidly disappears under effective training.

SANDLANDS'S VOICE AND PUBLIC SPRAKING.

The Voice and Public Speaking. By J. P. Sandlands, M.A., Vicar of Brigstock. London: Hodder and Stoughton. 1879.

A VERY superficial acquaintance with the faculties of mind is sufficient to teach that the powers of acquiring and imparting knowledge are too often divorced. Many who, in Cicero's words, are "eruditus," nay, eruditissimus, have no claim to the aptus ad dicendum. The lack of such power is frequently a bar to usefulness. Whatever is worth saying at all is worth saying well. Hence the cultivation of the power of expressing the thoughts not only intelligibly, but also with elegance, should form part of the self-discipline of every educated man. All cannot become public speakers; but that does not lessen the responsibility of man as a social being. There is a mightier influence than occasional public oratory, quietly but continuously at work in society—the oratory of daily conversation. The eloquent tongue, as the eloquent pen, in the personal intercourse of private life may exert a powerful influence for good when rightly employed. As a general rule a truth does not impress us so much on account of its intrinsic value as of the manner in which it is presented. There is an attractive and effective, there is also an uninteresting and fruitless method of stating the same fact. But we are forgetting the author and his book. Though disposed to criticise many parts of the work we are pleased with its general tone and spirit. Mr. Sandlands is never tired of impressing on his readers the necessity of honest hard work and continued practice. The

object of the book, stated in the preface, is not to offer a substitute for work, but to direct it into its proper channels. Hence we find numerous exercises recommended to fit the organs for their work. To some, indeed, the chapters on "breathing," "the mouth," "the voice," may seem unnecessary or calculated to substitute a laborious and unnatural for a natural act. But unusual demands require special training, and it is surprising how soon the organism becomes accustomed to a new exercise—how soon (unconsciously) the mechanism acts in absence of special voluntary stimulus. This cultivation of the physical instrument, open to all, is the first sine gud non for the perfect orator. must possess the power of correct articulation, pronunciation, and modulation. In his chapter on pronunciation Mr. Sandlands places amongst the non-aspirated words hospital, and its derivatives -we much prefer the aspirate, especially in "hospitality." humble does not appear in the list we almost wonder he fails to refer to the constant omission of the "h" in the reading of the Church Service, which so unpleasantly reminds one of Dickens's hypocrite.

The most requisite for successful oratory is appropriate thoughts clothed in suitable words. Good speaking means hard thinking. There is an innate facility of speech which, so far from necessarily constituting the possessor an orator, often proves a sad hindrance

to success. Alexander Pope has truly said-

"Words are like leaves, and where they most abound, Much fruit of sense beneath is rarely found."

Mere verbiage takes the place of solid thought: it dazzles for the moment, but will bear no inspection. Let those who possess this gift, valuable when reined in by reason, beware how they speak! We cannot stay to discuss the various points coming under the head of "manner of delivery," all included, no doubt, in Cicero's "actio." One thing however demands attention, and is not forgotten by Mr. Sandlands. If a speaker would influence his audience he must be in earnest himself. No outward conformity to rule will suffice. The expression of feeling to be effective must be genuine. There must be "soul" in his words-or what Mr. Sandlands is pleased to call "nerve-force." "Speaking and reading, however good mechanically, must, more or less, without this nerve-force, fall dull, heavy, and flat on the ears of any audience. A sermon, even though it be written in the finest language, on the most solemn subject, without this thing, fails to excite any feelings in the hearers. And how many sermons of this kind are constantly preached! This is the state of things that obtains to a very sad and deplorable extent. The preacher ascends the pulpit stairs. He opens his manuscript. He knows very little about it, for he has merely read it through. He is

supposed to be going to preach, but he will do nothing of the kind. Preaching implies many things of which he has no just conception. It implies the delivery of a message, by a messenger, charged with it by one in authority. The conditions are suchought to be such—as to call up into earnest operation all the nerve-force in his soul. Instead of this he reads, as any schoolboy, of ordinary capacity, would do. There's no fire, no soul, no life." An orator has no higher call than to the pulpit; no stronger stimulus than that symbolised by the tongue of fire; no grander subject than St. Paul's-"Christ crucified." If anything will bring out the orator in a man, it is the love of God. As Mr. Sandlands indicates, there is too often a want of the internal stimulus in those entrusted with the spiritual interests of the pepole. Amongst Nonconformists, however, where a special call to the ministry is required, the danger lies in another direction. However exalted the end, enthusiasm must not spurn the means. No perfection in oratory or depth of learning need rob the message of its simplicity. All powers are bestowed upon us as "talents." They must be improved as well as used. The world's best orators have taken most pains to cultivate their powers. Innate talent does not supersede but demands attentive education. Then let all those who have the heaven-sent stimulus within, so discipline the physical instrument and develop the mental powers that the message may be presented in all the fulness of its beauty.

MACDONNELL'S FRANCE UNDER THE FIRST EMPIRE.

France Since the First Empire. By James Macdonnell.
Edited by His Wife. London: Macmillan and Co.
1879.

THE happy change which has come over the relations between ourselves and our neighbours on the other side of the "silver streak" is great and noteworthy. The "natural enemies" of centuries are among the firmest of friends to-day. How recent is the change is shown by the fact that the Volunteer movement, which has scarcely attained middle age, had its origin in fear of French invasion. A principal instrument in bringing about the change has undoubtedly been the great increase that has taken place in commercial and social intercourse. Ignorance is the mother, if not of devotion, of national prejudices and hatreds. As we have come to know each other better, we have unlearnt the old distrust and fear. Mutual respect has grown out of the soil of better acquaintance. We should like to see the same process applied in other cases. Even during the Franco-German War, while few in this country justified its origin in the case of France, there were few who did not follow with more or less secret

sympathy the gallant struggles of a brave but misled people, and fewer still who approved the heavy terms exacted by the conqueror. Although we are bound to Germany by closer ties of blood, language, and faith, it may be doubted whether there is not more sympathy in England with French character and history than with German.

Mr. Macdonnell's posthumous volume will help to make France still better known. The writer, a brilliant journalist fated to die young, was an enthusiastic student of modern French history and politics. He followed every public movement in newspapers, essays, memoirs, histories, intending to write a history of French political parties, and then a history of France during this century. The present fragment is all that was accomplished of the first part of the scheme. The sketches of the Legitimists, Orleanists, and Bonapartists are tolerably complete, but the account of the Republicans, with whom the writer passionately sympathised, was not even begun. The style is thoroughly French in grace, brilliance, point, and we must add in tendency to exaggeration for the sake of a telling antithesis. The portraits of leading Frenchmen are vividly drawn, that of M. Thiers being the fullest. would be wrong to omit that the writer is not blind to the merits of those whose general character he most strongly condemns. This holds good in every instance. The following is the tribute he pays to the Legitimist party: "Some of us may say that the graces of Versailles and the Tuileries could have been learned only by making the little elegancies of speech and form more momentous than the larger things of public duty. Yet nations lose something when they give up, as they must do in the midst of modern hurry, the grand air of the old society. Life should be gracious as well as enlightened, the friction of unlimited competition should be eased by those courtesies which are the codified marks of self respect or good-will, and we should ever keep in mind the civilising influence or dignity. Let us not forget that the old courts, if they spent our money and shed our blood without our leave, did teach us manners."

Not the least valuable part of the work is the emphatic testimony borne to the conservative instincts of French society. The question of the permanence of the Republic undoubtedly depends upon its ability to gain the confidence of the masses of the peasantry, four millions of whom hold property in land. "Industry is their master passion, and they have almost succeeded in converting frugality into a vice. However ignorant such a peasantry may be, they are models of Conservatism, and they form the broad basis on which the political fabric of France must rest." "The French are essentially the most conservative people in Europe, the people most keen for acquisition, and the people among whom property is most widely diffused. Eight

Frenchmen in every ten hold property, and they are perfectly certain not to give it up. They are not generous, they never subscribe, and they always push all claims to money to their precise legal limit. They will never consent to any system of division, or to any annexation of inheritances by the State; and the Communists of the cities, if they rise a hundred times over, will be put down a hundred times. Society in France is founded on a rock. It is the one country in Europe in which social revolution, that is successful revolution, not a mere *emeute*, is impossible." That evidence differs considerably from popular opinion, but it is the evidence of one who knew the people and country well.

FOREIGN CLASSICS FOR ENGLISH READERS.

Foreign Classics for English Readers. "Montaigne," by Rev. W. Lucas Collins, Author of "The Public Schools," &c. "Calderon," by E. J. Hasell. W. Blackwood and Sons.

PERHAPS no writer has made his readers love him more than Montaigne, for no writer takes the reader more thoroughly into his confidence. We have no exact English parallel to him. Sir Thos. Browne perhaps comes nearest, but neither he, nor Burton, of The Anatomy of Melancholy, have gained the hundredth part of Montaigne's influence. Charles Lamb might have been a Montaigne, had he cared to write at leisure instead of frittering himself away in the newspapers. When a man of very considerable powers undertakes to be his own Boswell, and interweaves with his essays a De Senectute of which himself is the subject, he is sure to write what not only the world will read, but what will have a special charm for a large class of readers. As Montaigne says, "Many things which I would not confess to any one individual, I entrust to the public; and for my most secret thoughts and conscience refer my most trusted friends to the bookseller's shop;" and, again, "To meet the objections of the Huguenots, who condemn our auricular and private confession, I confess myself in public, religiously and honestly."

Every literary generation of his countrymen has owed more or less to him; and, among us, not only did Swift and Sterne study him of set purpose, but Shakespeare had read him in some form. The supposed autograph and notes in the copy of Florio's "Montaigne," in the British Museum, dated 1603, are (Mr. Collins thinks) of very doubtful authenticity; but he says that the description of Utopia in The Tempest, ii. 1, "I' the commonwealth I would by contraries execute all things, &c.," is almost word for

word from the " Essay on Cannibala."

Montaigne's family name was Eyguem—of English origin, he says; in which case it may have been corrupted from Egham or

Ockham. His father, "the best and most indulgent father that ever was," counts for much in his early training; and this best of sons (who used to ride out in his father's old military cloak, "because when I have this on I seem to wrap myself up in my father ") gives full details about the peculiarities of his training. To attach him to the lower classes (a most remarkable thing in a French gentleman of that day), he had him held at the first "by persons of the meanest condition," chose, i.e., his god-parents from the very poor; and the result was that Montaigne writes, "I attach myself very readily to such people, whether it is because one gets more honour in such intercourse" (he is always severe in self-analysis) "or out of a natural compassion which is very strong in me." father, who taught his son to hate a lie above all things, had some curious ideas. Having heard that children's tender brains are disturbed by being suddenly roused, he kept a musician on purpose to wake his delicate third son, the Essayist, to the sound of soft music. Latin he had him taught while he was yet at nurse, giving him in charge to a German physician who could speak no French. There were two others, less learned, to relieve the first; and, besides, the rest of the household-father, mother, valet, chambermaid—never spoke anything in his presence but the few words of Latin they had picked up for the purpose. Latin words even trickled down into the village, and got a footing there. Before he had got the same thorough acquaintance with Greek, which at six years old he had with Latin, he was sent to the Guienne College at Bordeaux, where he studied under Muret (Muretus) and Buchanan, the Latin verse writer. From the latter, who long afterwards unworthily attacked the memory of Mary, Queen of Scots, he differed wholly in his estimate of that unhappy princess. He saw her in Paris in the heyday of her prosperity, and in the Essays he speaks of her as "the fairest of all queens," and of her execution as "an act of disgraceful and barbarous cruelty." We cannot follow Montaigne through his uneventful life, his courtier days under Charles IX., his travels (strangely unawake he was to the grandeur of mountains, and to the historic interest of the ruins of old Rome), his mayoralty of Bordeaux during the troublous times of the League, and his friendship for Henry IV. Of his style it is enough to say that it was a protest against the artificial and stilted literature of the day. This, and also his motives for writing, and the value of his Essays, Mr. Collins discusses with the thoroughness and insight which we might expect from the able editor of Ancient Classics for English Readers. We trust the effect of the book will be to make this muchtalked-of author better known and more read.

Of Calderon a section of the reading public knows more than most of us do of Montaigne; for, not to speak of Archbishop Trench's and Mr. Fitzgerald's versions, several whole plays have

been admirably translated by Mr. D. F. MacCarthy. Still, to the mass of readers, the greatest of Spanish dramatists has hitherto been a name and nothing more. Hence the great value of Mrs. Oliphant's series; in this age, which is nothing if not practical, it seems a shame to talk about writers of whom we know little beyond the fact of their nationality. No reader of Mr. Hasell can fail to learn not only all that need be known about Calderon personally, but also his place in the world's literature, and the influence he has exerted on other (chiefly on French) schools. We should have been glad to have more about the beginnings of the Spanish drama, but this may come more appropriately in a life of Lope de Vega, who, with his 500 surviving plays (he wrote 1,200: of Calderon we have 118 extant plays and 72 autos), well deserves a place in this series. Anyhow, it is not enough to say that "Greece, after the Persian War, England and Spain, after the discovery of the New World and the introduction of the New Learning, produced each of them that rare thing, a great and truly national drama." The Spanish is far more exclusively national than the English: in its subjects it goes far less afield than Shakespeare, who took so many plots from the great storehouse of Italian tales. Spanish playgoers are treated as if The Merry Wives of Windsor, written in a Protean variety of forms, had been served up for an English audience. In its style and manner it is far less "catholic" than our drama. Frenchmen used to find it hard to appreciate Shakespeare. Voltaire said some foolishly hard things of him; but for Englishmen to appreciate Calderon is harder still: if the former is called insular (which he is not), the latter is unquestionably Castilian to a degree. Hence a certain want of sympathy between us and him; and hence all the more need that we should read Mr. Hasell, for whose careful analysis of plots and choice of translated morceaux we cannot be sufficiently grateful. To him, too, we must refer the reader for the facts of Calderon's life. The Spaniard has this in common with our greatest dramatist, that he did not at all model his plays on the antique; he thoroughly despises the unities. In one sense he is thoroughly "Catholic;" his autos (religious poems) he himself valued far above his dramas.

Palmer's Migration from Shinar.

The Migration from Shinar; or, The Earliest Links between the Old and the New Continents. By Captain George Palmer, R.N., F.R.G.S. Hodder and Stoughton.

CAPTAIN PALMER, during eight years' cruising in the Pacific, had the opportunity of testing the ocean currents, as well as of investi-

gating the traditions of Polynesians and Melanesians; and he was forcibly struck with the testimony thus borne to the unity of the human race. On this point he is very strong, feeling that the testimony of God's Word is decisive, "from the three sons of Noah was the whole earth overspread." He shows that the peopling of America presents no difficulty; only a few years ago a Japanese junk was picked up at the mouth of the Columbia river. The Norsemen undoubtedly pushed on as far as Virginia.* On the other hand, in 1682 and 1684, some Esquimaux were driven to sea in their canoes and landed safely in the Orkneys. That the Berbors of North Africa—the same race, Captain Palmer says, as the Graanches of the Canaries—made these islands their stepping stone to America is not certain, but the nature of the Central American civilisation, he tells us, makes it probable. One thing is very certain with regard to America—that " a civilised and well-developed race would (as Dr. Dawson says in his recent book on the Earth and Man) seem to have had the precedence of all others. This statement, we shall find, may apply to Europe also, notwithstanding the mythical notions of a paleolithic age of barbarism." Thus the Neanderthal skull, supposed to be typical, and to prove that the earliest men in Europe were little better than apes, is (says Captain Palmer) clearly abnormal. The Coro-Maguon skull, on the contrary, contained a brain larger than that of average modern men, and the frontal region was largely and well developed, "utterly failing to vindicate the expectations of those who would regard prehistoric man as approaching to apes."

Captain Palmer's conclusion, then, is that in ancient America there was a highly developed civilisation; and, in general, that civilisation has preceded barbarism—that the savage is a degenerate creature. He cites instances of modern degeneracy—the Portuguese in the penal colony of Fernando Noronha, the pure-blood Spaniards of Ecuador, the Arabians of Socotra, the lrish in Sligo and North Mayo. "Hunger and ignorance, the two great brutalisers of the human race, will soon make a people

degenerate."

As to the negro being pictured as he is now on Egyptian monuments dating from 2,000 years B.C., 1,200 years (from the Deluge to the time when these sculptures were executed) is ample time (he argues) for the negro race to have been developed, even supposing we are to put aside the possibility of a miraculous interposition with regard to the posterity of Canaan. How rapidly race distinctions are formed we seldom think. "Your Yankse

[•] Captain Palmer is wrong in arguing that the first inhabitants of Iceland, i.e. Scandinavians, may have come from America, because in the oldest chronicles they are called "Westmen who had come across the sea." These Westmen were Irish, in contradistinction to the Eastmen, Ostmen, who found Irish bells and books on the island.

(says Professor Kitchen) is a good sub-species already. A Red Indian can always tell an Englishman from an American, as the latter have often found to their cost." With regard to the earliest races being the most civilised, we may refer to the important concession of Mr. Wallace (noticed by us some numbers back) that in Egypt the old sculptures are the best. Civilisation there must have been born full-grown. Along with this priority of civilisation to barbarism, Captain Palmer insists strongly on the unity of the human race. "This unity is indubitably marked by one sad stamp—sin."

The details which he brings, in support of this unity of migrations in all directions across the great Pacific, and of the early civilisations of America and the unsuspected connection of American and Aryan tongues, will be read with great interest by all who care for what the attitude of modern science makes

"burning questions."

We should add that these pages were originally delivered as lectures to working men in the schoolroom of Cavers, Roxburghshire. The book contains a good map, giving the ocean currents and the known and probable routes to America before the days of Columbus.

KINGSLEY'S LETTERS, &c., OF C. KINGSLEY.

Charles Kingsley: his Letters, and Memorials of his Life.

Edited by his Wife. Two Vols. Fifth Abridged
Edition, with Portraits and Illustrations. London:

C. Kegan Paul and Co. 1879.

It rarely happens that an abridged edition of a book possessing intrinsic merit is so valuable as the first and full one. But in this case the state of Mrs. Kingsley's health prevented her from giving such close attention to the form of her work as she had since bestowed upon it, and the present edition of her husband's life is the one by which she would prefer to be judged and remembered. Though we miss with reluctance a single line from Charles Kingsley's own pen, we are bound to confess that the excisions, which are not numerous, have been made with great judgment and appreciation, and that the alterations, which chiefly consist of rearrangement, render the narrative more clear and consecutive. It is generally supposed that a man's nearest surviving relation and especially his wife-will not make his best biographer: that such persons stood too close to their subject to have clear vision, and must unconsciously magnify virtues and exaggerate influences. But if this be the rule, the widow of Charles Kingsley is the exception. Nothing is preserved by her which is unnecessary to a perfect portrait, or inconsistent with the absolute exactness and sincerity which were Kingeley's own favourite virtues.

The result is that the man lives, moves, and thinks in her pages; that we know him in his struggles and successes, his anxieties and rewards; and understand that rare combination of a sensitive spirit, a warm heart, and an indomitable will, which ensured him such influence over all with whom he came into contact, and gave his writings a power over men almost equal to personal com-One great' secret of the success of his writings is munion. made clear in the letters which are here so freely quoted. Whatever Kingsley did he did with all his soul and all his strength; it was always incumbent on him to give of his best, whether in his parish work, where hand and heart and head were at the service of the poor; in his intercourse with men whose culture and knowledge had become to them only sources of spiritual perplexity, and who asked enlightenment and support from his stronger faith; or in his vast correspondence, which would in itself have afforded sufficient occupation to many industrious men. He never wanted time or patience or inclination to answer questions asked of him in earnestness and simplicity, even by total strangers, rich or poor, obscure or famous; and his letters were as original, forcible, and thorough as any of his published writings. nothing in his books more delightful than the letters to his wife describing the scenes he passed through, and the pursuits which occupied him during the few holidays he took away from Eversley; nothing in his sermons more eloquent, fervent, and solemn than his pleadings with those correspondents, often absolutely unknown, who had cried to him for help, and whom he strove to save from apostacy or infidelity. His comments on the men and events of the times at which he wrote, whether we may invariably agree with them or not, are always worth reading—acute, vigorous, and large-minded; and his incidental criticisms on books present their essence in a sentence. Mrs. Kingsley has been most fortunate in those who have assisted in her labour of love: Mr. Kegan Paul's distinct and complete picture of life at Eversley Rectory; Mr. Tom Hughes's clear analysis of the manysidedness which made Kingsley both an aristocrat by sympathy and a democrat by conviction, and the mingled sensitiveness and conscientiousness which drove him to do most unflinchingly that which cost him most pain; the Professor at Capetown, who was an undergraduate when Kingslev lectured at Cambridge, and who describes with touching earnestness and emotion his immense power for good over young men, the modesty and directness of his manner, the electric force of his mind; these and many others who record personal recollections of their helper and their friend, combine to give her book the crowning merit of all biography—that in closing it we feel that we know not only Kingsley's actions and opinions, but Kingslev himself.

FAWCETT'S INDIAN FINANCE.

Indian Finance. Three Essays, republished from the "Nineteenth Century." With an Introduction and Appendix. By Henry Fawcett, M.P. London: Macmillan and Co.

Professor Fawcett has recently acquired considerable influence on subjects connected with Indian Government. His conduct in giving himself to the thorough study and impartial discussion of Indian questions will, we trust, find imitators in other public men of equal ability and position. In the absence of formal representatives, the interests of the millions of India can only be represented by the efforts of independent Members of Parliament. The essays here republished are full of interesting matter to all who care for our Indian Empire. The gist of the essays is that the time has arrived for Parliamentary inquiry into the working of the Act of Transference in 1858. Diametrically opposite interpretations are given of the wording of the enactments. There is direct conflict of opinion and jurisdiction. Under the Company the whole system of government was overhauled on the renewal of the charter every twenty years. The inquiries lasted years. and employed the foremost public men. The changes which have taken place during the last twenty years make a similar inquiry necessary now. We hope that these essays will receive the careful study they deserve, and accomplish the results desired by their author.