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#### DANTE AND MEDIEVAL THOUGHT.

I.-THE THEOLOGY OF DANTE.

THE Middle Ages may not inaptly be regarded as the period in which a preparation was made for the wider and freer life of modern times by the gradual appropriation of the culture of the past, as illuminated and transformed by the spirit of Christiamty. When we consider the complexity of the material, we cannot be surprised that the process of assimilation was incomplete. Judea, Greece and Rome may each be said to have concentrated itself on a single task: it was the problem of the Middle Ages to combine into a whole the religion of Christ, the philosophy of Greece, and the law and polity of Rome; and to harmonize these various elements with the powerful individuality and love of freedom characteristic of the Germanic peoples. The imperfect fusion of these factors is shown in the series of antagonisms, which rule the whole of medieval thought: the future life is opposed to the present, the sacred to the secular, faith to rea-But, it was the church, and the church alone, which preserved the germs of a speculative view of the world, and made possible the rise in due time of modern philosophy. In the dissolution of the old order of society, and while a new order was gradually shaping itself, it developed from the invisible beginning of a small religious community into a compact and powerful organization. In its office of teacher of Europe, the Church employed the system of doctrine which received its final form at the hands of Augustine, its great speculative genius, and in that

system the dualism of the present and the future life, the Church and the world, faith and reason, is already stated in its most uncompromising form.

Now Dante is the champion and exponent of this dualism, and yet he seizes it at the moment when it is passing away. His theology is Christianity speaking in terms of Neo-platonism and Aristotelianism. His passion for political freedom is Germanic, but it utters itself in the language of imperial Rome. His impassioned zeal for the regeneration of society is half concealed in his vivid picture of the horrors of Hell, the expiatory punishments of Purgatory and the glories of Paradise. The spirit of the coming age speaks through him, but it clothes itself in the forms and the language of the past. In coming to the study of such a writer we must seek to do justice both to what he explicitly affirms, and what he unconsciously suggests. The spell of Dante's genius is so potent that there is danger of our attributing to him ideas beyoud his age. This danger we must endeavour to avoid, but we must also beware of the more serious mistake of narrowing down · the large suggestiveness of his poetic intuitions to the Procrustean bed of his explicit logic. What Goethe says of Byron is in some degree true of every poet, that "when he reflects he is a child." This is especially true of Dante, who like all medieval thinkers proceeds from preconceptions which we cannot accept, and moves to his conclusions by a method of ratiocination which to us seems almost childish. To do him justice we must fix our attention upon the perennial truths which these preconceptions and artificial forms of reasoning merely indicate. interest of Dante lies in the conflict between the old and the new, a conflict which was on his part largely unconscious. force of his genius he holds together discrepant elements which can only be reconciled in a higher synthesis. The movement towards a more comprehensive view of life, which he never himself explicitly reaches, is partly indicated by the way in which he makes Bonaventura and other mystics supplement the deficiencies of Aquinas. He follows the great schoolman as far as the critical intellect enables him to give a clearly formulated theory, and when he is seeking to express the Unity of all things as summed up in God he falls back upon the mystics. Within the limits of medieval thought Dante's sympathy is wide and flexible:

he combines Bonaventura with Aquinas: he enters with the same warmth of appreciation into the stern conflict with error of St. Dominic as into the loving ministrations of St. Francis. His catholicity is perhaps nowhere more clearly shown than in his placing Averroes among the throng of philosophers who surround the "Master of those who know." This is the same Averroes against whom the Synod of Paris had fulminated as the greatest corruptor of the faith. Dante simply calls him "Averroes who made the great commentary." Notwithstanding these and many other instances of independence and breadth of view, Dante is a true son of the medieval church. Liberality in the modern sense he does not possess. Carlyle is quite right in saying that he "does not come before us as a large, catholic mind, rather as a narrow and even sectarian mind;" though we must not forget that his narrowness and sectarianism are rather in his formulated creed than in the spirit which informs the free creations of his genius. One is tempted to discount the intellectual narrowness of the first great Christian poet, and dwell only upon the permanent element in his "criticism of life": but I doubt if this method is as valuable as that which takes him as he is, in his weakness as well as his strength; and I shall therefore begin with the explicit creed which forms what may be called the philosophy of Dante.

The opposition of faith and reason which rules all the thought of the Middle Ages is accepted and defended by Dante. truths of faith rest upon the revelation of God as contained in "the old and new scrolls." They are not only beyond the power of human reason to discover for itself, but they are incapable of being comprehended even when they have been revealed. God is indeed partly manifested in created things, but the infinite riches of His nature is revealed only in his word, and even then the human mind must in this life be contented to accept what is revealed without seeking to penetrate the mysteries of faith. "Be content, race of man, with the quia: for if you could have seen all, what need was there that Mary should be a mother!" In the future life, indeed, man will see God as he is. This is expressed by Dante in his pictorial way when he represents Beatrice as fixing her eyes on the vast circling spheres of heaven, and finds himself drawn upwards by her eyes, being like Glaucus "transhumanized" or raised above the limits of the finite intellect. How weak human reason is of itself is shown by the errors into which we fall when we trust to our senses. Mere human knowledge is as far from divine knowledge as heaven is from the earth. The proper attitude of man towards the revelation which God has given of himself is therefore that of implicit faith. Having accepted the truths so revealed human reason may draw inferences from them, but it can never discover them for itself. Yet faith is not contrary to reason, but only beyond it; when man is at last admitted to the beatific vision of God, he will then directly contemplate what he can now only accept in faith. Moreover, the human mind partly bears the impress of its divine Original, and hence it cannot be altogether without some apprehension of God; it discovers the divine nature dimly, as the eve sees the bottom of the sea at the shore, though it cannot penetrate the unfathomable depths of the ocean. Philosophy prepares the way for theology by proving the scriptures to be the veritable word of God. The evidence is mainly that of miracles, but one of the strongest proofs, as Dante follows Augustine in maintaining, is the miracu-"If the world lous conversion of the world to the true faith. turned to Christianity without the supernatural guidance of God himself, this would be the greatest of all miracles."

The contrast of faith and reason is one with which we are all familiar, and it may be doubted if modern writers have added anything substantial to the doctrine as Dante presents it. Even the distinction of what is above but not contrary to reason he clearly The contrast is one which draws its support from various considerations. To Dante and all medieval thinkers it implied an identification of the contents of the holy scriptures with the dogmas of the Church. To us it is perfectly plain that such an identification rests upon a confusion between the fundamental truths expressed by the sacred writers and the interpretation put upon them by thinkers who brought to them forms of thought borrowed from later Greek philosophy. I do not say for a moment that the effort to express the Christian view of the world in terms of reflection was not a legitimate and necessary problem; on the contrary, it arose from the healthy instinct that Christianity was based upon an impregnable basis of truth. But the inevitable result of the attempt to extract a theology from the letter of scripture by the use of dualistic categories was to distort to some extent the essential ideas of Christianity. It is thus obvious that the claim which Dante makes for faith is really a claim for the implicit acceptance of the dogmas of the Church, themselves the product of an inadequate historical criticism and an inadequate form of philosophy.

There is, however, another element which contributes to the conviction of the opposition of faith and reason. consciousness rests upon the idea of God, as the absolutely perfect Being, in whose presence man becomes aware of his weakness This consciousness, though in an imperfect and undeveloped form, is found in even the lowest races of mankind, and indeed is inseparable from the consciousness of self. It ranges from the superstitious terror of the fetichist to the perfect love which casts out fear of the highest Christian consciousness. To a man like Dante, coming at the close of a period when the Christian idea of life had been proving its divine potency by transforming the whole life and thought of men, teaching them to rise above the transient things of sense and to view all things sub specie aeternitatis, the consciousness of human weakness and sinfulness was the central truth-of the universe, in comparison with which all other truths seemed comparatively insignificant. What attitude but that of faith is becoming to finite man in the presence of the infinitude of God? Now, in so far as Dante by "faith" means this consciousness of dependence upon God, he is only expressing the natural attitude of every religious spirit. But it must be observed that "faith" in this sense is to be contrasted, not with "reason," but with the irreligious spirit of self-assertion, and with that limited and inadequate view of existence which never rises The Christian religion, above all others, in bringing home to man the consciousness of the infinite perfection of the divine nature, destroys the very root of self-righteousness, making him feel that "after he has done all he is an unprofitable servant." But such a "faith" is not the opposite of "reason," but the very essence of reason; it is the revelation of the true nature of man as capable of finding his life only in losing it; it is a "faith" which fills his whole being and is the informing spirit of all that makes his life divine. Dante, however, in the usual medieval manner confuses this living practical faith with that

formulation of Christian ideas which had been stereotyped in the creed of the Church. Thus he virtually identifies Religion with Theology. To us it is perfectly obvious that, so far from being identical, the one may be widely apart from the other. It is not the "heart" that makes the theologian, except when theology brings to adequate expression what is implicit in the "heart." When "faith" is opposed to "reason," on the ground that the former contains truths incomprehensible by the latter, we are assuming a certain formulation of religious truth to be ultimate, and contrasting with it the irreligious view of the world. We forget that our theology may itself be inadequate. Now, a theology which is based upon a supposed absolute limit in human reason is necessarily inadequate, because it rests upon a fundamental contradiction. We can contrast a lower and higher form of reason, but to assert an absolute opposition of reason with itself is to make all our judgments, and therefore our theological judgments, unmeaning. A faith which is opposed to reason must be irrational. Theology, in so far as it expresses in terms of reflection what is implicit in the highest religious consciousness, is knowledge; it is in fact the philosophy of religion; and hence there can in this point of view be no valid opposition between truths of faith and truths of reason.

There is, however, another complication which gives countenance to the opposition of faith and reason. Faith, it is thought, rests upon truths directly revealed by God himself, whereas the truths of reason are the product of the natural and normal exercise of the human mind. Now, in so far as this means that there have been men who were lifted above the divisive consciousness which is immersed in the finite and particular it is undoubtedly But surely it cannot be meant that God is present in some operations of the human mind and not in others, or that man can be man without having some consciousness of the Infinite. holy men of old who spake as they were moved by the Holy Spirit were indeed inspired, but their inspiration consisted in realizing the divine meaning of the world with a power and vividness that ordinary men never reach, or reach only in their best moments. And what is thus revealed in them, the truths with which they are inspired, are not unintelligible mysteries. They speak as they are moved, but what they utter is the highest

knowledge, and can seem unintelligible only to those who are unable to enter into the fulness of its meaning. Hence faith must consist in elevation to the point of view of the elect of the race, and failure to reach this point of view must make our faith inade-To commend faith because it blindly accepts what is declared to be unintelligible, is to degrade not to elevate it. faith which is higher than knowledge can only be knowledge in its highest form. Like all medieval thinkers Dante holds that human reason is by its very nature conditioned, and therefore unable to comprehend the "mysteries" of faith. But a true faith can contain no "mysteries" that are irrational, but only those which seem irrational to the mind which operates with inadequate It is therefore the task of philosophy, or theology, to prove that they are rational, and this can only be done by showing that in the knowledge of the finite the knowledge of the infinite is tacitly presupposed, though it is not brought to clear consciousness. Dante himself admits that reason can prove the existence of God, though he adds that it cannot comprehend the inner nature of God. But to prove the existence of God is to show that He is manifested in all forms of existence, and a Being so manifested cannot be unknown, much less unknowable. instructive to see how in our own day the doctrine of the absolute limitation of the human intellect has by an inevitable dialectic Sir William Hamilton issued in a thinly-veiled scepticism. argued that, as to think is to condition, the Absolute is unthink-His follower Mansel went on to show that, whatever predicate we attach to the idea of God, it breaks down in contradic-Thus for us God becomes the Being of whom we can pre-Mr. Herbert Spencer is therefore only drawing the legitimate inference when he maintains that of the Absolute we can only affirm pure being. But an Absolute of whom we can predicate nothing is for us nothing, and thus the very idea of the Absolute vanishes away, and the only reality is the Relative. The doctrine of the opposition of faith and knowledge is a perilous weapon to handle, and invariably wounds the hand which wields it. If Theology is to be a real defender of the faith, it must concentrate its efforts upon a purification of the traditional creed, and the elevation of it into a science, which like other sciences needs no external support. The medieval separation of faith and reason virtually received its death-blow at the Reformation, and if we are wise we shall abandon all attempts to retain it, and direct our efforts to the really fruitful task of exhibiting the essential rationality of the Christian conception of life.

We have seen how Dante draws an absolute distinction between faith and reason, maintaining that by the former we are carried beyond the limits of knowledge, and have therefore to be contented with a simple acceptance of truths which remain for us incomprehensible. How impossible it is consistently to maintain such an opposition becomes apparent from Dante himself, when he goes on to define the nature of God, i.e., to make intelligible what he has declared to be unintelligible. God, he tells us, is one and eternal: himself unchangeable He is the cause of all the changes in the universe. In the perfect mirror of his intelligence all things are reflected as they really are, but He is not himself perfectly reflected in any. He is thus the absolute concentration of Truth. The "good of the intellect" is to know Him, for to know Him is to know the Truth. He is the supreme Good, and all good contained in other beings is a reflection from Him, and is therefore finite and limited. Hence all created beings, in so far as they comprehend the good, strive to realize it, and in so striving they are seeking after God. In lower forms of being the yearning after God takes the form of a blind desire, in the higher creatures it is expressed as love. As the sun illuminates all things, so the glory of God suffuses the whole universe, but in varying degrees of completeness. The love of God is revealed in all things, but it shines most clearly in the higher intelligences. In God knowledge is absolutely complete: in the "great volume" of his intelligence all is perfectly known, and therefore in his mind there is no process. In Him there is no 'here' or 'there', no 'before' or 'after': all is an eternal 'now'. As God is infinitely perfect, there is in Him an absolute harmony of Knowledge, Will and Power, just as heat and light perfectly interpenetrate and coincide in a ray of sunlight. Though God is absolutely one, He is in three persons. the profound and glorious substance of the high Light there appeared to me three circles of three colors and one potency: and the one seemed reflected by the second, as rainbow by rainbow, and the third seemed fire, which from one to the other is

breathed forth in equal measure." In this imperfect symbol Dante seeks to give some faint indication of the incomprehensible mystery of the Trinity, for of more no human mind is capable. "Mad is he who hopes by reason to travel over the boundless way which holds one Substance in three Persons."

The creation of the world proceeded from the eternal Love of For, as nothing can add to the perfection of God, the act of creation is the spontaneous outflow of Love, which ever seeks to reflect itself in new loves. Before creation there was nothing, not even formless matter, but form and matter flashed into being together in a single instantaneous act of creation. Contemplating the whole hierarchy of forms in the Logos, the Creator knew all things ere they were created and loved them with the Son in the Spirit. Thus there came into being the nine heavenly spheres, in which his glory is most perfectly expressed, and by gradual descent the various orders of being, immortal and mortal, until at last it almost fades away in mere accidental and transitory peculiarities. Every created thing is therefore a more or less perfect reflection of the Divine Being, and hence he who apprehends the order or scale of being cannot be altogether ignorant of God. The only beings which are indestructible are the heavens, the angels and the rational souls of men; the first because they have a peculiar matter of their own, the others because they are pure forms. On the other hand, all things composed of the elements, as well as the soul in its lower forms as nutritive or vegetative and animal, imply the temporary union of matter and form and are therefore destructible. Dante's view of the relation of the various orders of being to God as the goal of all their striving is thus summed up. "The whole sum of things displays an order or scale of being, --a 'form' which makes the universe a reflection of God. Herein the higher creatures see traces of the eternal goodness, and this is the end for which the orderly arrangement of beings has been made. According to their rank in the scale of being all things tend by a path more or less direct to their primal source, moving onward through the vast ocean of being to different ports, in harmony with their peculiar nature." Not only has divine Love fixed this scale of being, but it brings all things to their appointed goal, and were it not so the whole universe would fall into chaos. Yet,

though God foresees and orders all things, man as a rational being is endowed with freedom or self-determination.

Even this imperfect statement of Dante's conception of God and of the relation of the various orders of being to God as their beginning and end is enough to indicate the substantial truth of his doctrine. To the man who lived in such a faith life could not be otherwise than earnest and noble. Nevertheless, the theology of Dante is nowhere put to so severe a strain as in its effort to express the nature of God and his relation to the world of finite This was inevitable, because the Christian idea of God seems to combine conceptions which the understanding in its ordinary use regards as mutually exclusive. Thus Dante tells us that God is absolutely one and indivisible, while yet He contains in himself three absolutely distinct Persons. He is absolutely complete in himself before the creation of the world, but the infinite Love which forms his very essence must express itself in the creation of finite beings towards whom his love is manifested. God orders all things, and yet man has absolute freedom of action. Nor can the union of such apparently opposite predicates in a single conception be regarded as a mere attempt to do violence to all the laws of our intelligence; it is the expression of an idea to which the human mind has been forced, in its effort to frame an adequate theory of the universe; and unless we can justify it, we shall have to fall back in despair upon the virtual scepticism which denies that we can comprehend God at all, and thus leaves us with a conviction of the illusive character of all that we call knowledge. It is therefore of supreme importance to look beneath the form in which Dante expresses his thought to the permanent and universal truth which it embodies. That his thought is inadequate in form is indicated by the fact that he continually takes refuge in a mystical symbolism; for symbolism is just the expression of a truth which is felt rather than comprehended.

The inadequacy of Dante's theology, like that of his master Aquinas, of which indeed it is mainly a summary, arises from his attempt to express the Christian idea of God in Aristotelian, Neoplatonic and Jewish formulae. He adopts the Aristotelian conception of God as the "unmoved mover"; the Being who, existing apart from the world in isolated self-completeness, acts upon it from without and is thus the "first cause" of all its changes. The

importance of such a conception as a first step towards the true idea of God is not to be denied. When we contemplate the changes of finite things, we inevitably seek for an explanation or cause of them, and a final explanation can never be found by simply going back along the series of changes, since each of those changes again requires a new cause to account for it. Yet this is the point of view from which the scientific consciousness regards the world, and hence it is not unfair to say that science as such can never give a final explanation of things. This is virtually confessed by Mr. Herbert Spencer, when, having argued that our solar system has been evolved from a primeval nebular matter, he tells us that we can go no further, but must simply accept this primeval matter as a fact. We may accept it as a fact, but we cannot accept it as a final explanation; and, unless we can satisfy ourselves with Mr. Spencer's "inscrutable mystery," we are forced to seek for a more adequate explanation than he has given us, or any scientific theory can furnish. When, therefore, it is maintained that the true cause or explanation of the changes in the world presupposes a cause which is not itself one of those changes, the reasoning is undoubtedly sound. A cause which is uncaused, or a self-acting being, is a conception which the inadequacy of the ordinary idea of cause compels us to adopt. This idea, in fact, is the basis of all purely monotheistic religions, which seize the truth that the explanation of the world must be sought in a Being whose nature is self-determined. But, while we admit that a self-determined Being is the necessary presupposition of all changes in the world, we must observe that such a Being is a cause only as He is active in the production of those changes. And this is what Monotheism, working with the conception of causality, actually affirms. So long, however, as we do not see all that is involved in the conception of a self-determined Being, we inevitably separate absolutely between that Being and the effects He produces. In other words, the conception of cause and effect from which we started still survives in this way, that the cause and the effect are regarded as two distinct things. Hence we conceive of the self-determined Being as complete both before and after the effects which He produces, or, what is the same thing, we separate God from the world, and having done so, we can only affirm that they are related without being able to

comprehend how they can be related. Yet our feeling of their relation cannot be extinguished, and we attempt to satisfy ourselves with analogies which suggest a relation that explicitly we have denied. This is what Dante does. To supplement the imperfection of the idea of God as the "unmoved mover," acting externally upon the world, he falls back upon the Neo-platonic idea of successive emanations proceeding from God and yet leaving Him alone in his isolated self-completeness. The various orders of being are thus figured, not as manifestations of God, but after the analogy of reflections or images in a mirror. But a reflection or image has no substantial reality. Such a metaphor merely conceals the unsolved contradiction involved in the conception of a Being who is self-determined in the sense of being self-complete apart from the activity which He exercises. If we are really to find God in the world we must be prepared to admit that the world is not something accidental, something which might or might not be, but is the necessary manifestation of God.

It is not only, however, the Aristotelian conception of an "unmoved mover" which hampered the theology of Dante, but also the conception of creation, which he found in the old testament, and which, as a faithful son of the Church, he never dreamt of questioning. For Dante, as for all medieval thinkers and for those who are still at the medieval point of view, the revelation of God was not a series of ever fuller revelations, but a dogmatic statement of different aspects of one unchanging system of truth given at different times. Starting from this preconception, he failed to see that the revelation of God which is given in Christianity transcends the idea of creation and substitutes the more adequate idea of the world as the self-manifestation of the divine nature. The earlier Jewish conception of creation rests upon the idea that God is complete in himself apart from the world, and that the world rather conceals than reveals Him. Nor did Dante even see that the conception of God as creator is not identical with the idea of an "unmoved mover" which he had borrowed from Aristotle. The Aristotelian idea is merely that of a Being who directs the movements or changes of a world which already exists. I do not think it is correct to say that Dante "implicitly accepts" the "eternity of matter," as an able exponent of Dante

maintains\*; but, in his continual use of the Aristotelian metaphor of the wax and the seal, he shows that he is not clearly aware of the distinction between a First Cause, or Former of the World, and a Creator. The confusion between these two conceptions may, however, be readily understood if we consider that they agree in conceiving of God as complete in himself apart from the world.

There is, however, another side to Dante's thought. Aristotle he finds among finite beings a graduated scale of existence. All contain a spark of the divine nature, and are continually striving towards their primal source. Now, if we fix our attention upon this aspect of Dante's thought, it becomes obvious that it cannot be reconciled with the conception of God as purely external to the world. If in all beings there is a tendency towards the divine, it must be because the divine is immanent in them, unless indeed we suppose that this tendency is only apparent. From the point of view of an external Designer, or even Creator, finite beings can only be regarded as a dead mechanical product; whereas beings whose very nature is to tend beyond themselves, ever seeking for union with God, must contain in themselves, in more or less adequate form, the principle of Unity which is the very essence of existence. In other words, the idea of the immanence of the divine nature in all things, which Dante expresses in a pictorial way as a reflection in them of the glory of God, is compatible only with the idea that they are in some sense This idea is most explicit in the contenself-determined beings. tion that man is a free being, for a free being cannot be the passive medium or instrument of any other being. At the same time Dante insists, and rightly insists, that there can be no freedom which is exclusive of the infinity of God. But, as the idea of God as an external Artificer or Creator still survives in his mind, he is again forced to take refuge in metaphors which merely conceal the unsolved contradiction of his thought. The only conception which can at all adequately express the true relation of the finite and infinite is that of an organic or spiritual unity, in which the same principle which is present in God as the unity of the whole is also present as the ruling principle in each of the parts. From this point of view we can see that the world is no arbitrary pro-

<sup>•</sup>Mr. Thomas Davidson in the Year Book of the American Dante Society for 1890-91; p. 58.

duct of the divine nature, but the expression of what that nature essentially is, and we can allow at the same time for the various degrees in which the different orders of being realize the principle of the divine. All beings contain the same essential principle, but only those beings who not only contain it but are capable of comprehending what it is, can properly be said to be identical in their nature with God. And this conception also enables us to allow for the gradual process by which man attains to the consciousness of his unity with God. For, only as he comes to the consciousness of the divine principle which is working in him does he truly understand himself. And as that principle essentially is the identity of all beings in their inner nature with all others, and therefore with God, man can find nothing absolutely foreign to himself; every step in the comprehension of nature, every phase in the development of society, of art, of philosophy, is a fuller revelation of the perfect nature of God. The point where Dante comes nearest to this idea is when he seeks to express the Christian conception of God as Love. For it is of the very essence of Love to go out of itself and find itself in another. An absolutely self-centred Being, complete in himself apart from all other beings, cannot be defined as Love. That conception Dante cannot entirely get rid of, but he virtually transcends it in his interpretation of the doctrine of the Trinity, where he tells us that God brought finite beings into existence in order to find objects in which his own nature should be reflected. If God's very nature is Love, He would not be himself were there no object in which his love is manifested; in other words, the world is the necessary self-revelation of God, not the arbitrary product of his mere good pleasure.

"Freundlos war der grosse Weltenmeister,
Fühlte Mangel, darum schuf er Geister,
Sel'ge Spiegel seiner Seligkeit.
Fand das höchste Wesen schon Kein Gleiches,
Aus dem Kelch des ganzen Wesenreiches
Schäumt ihm die Unendlichkeit."

JOHN WATSON,

#### A GREEK PLAY.

#### PART II. -THE ANTIGONE.

ITH Antigone's speech the Play begins.\* Addressing her sister Ismene in the most endearing terms, she reminds her of all the sorrows of their house. A new blow has fallen upon them now. Last night the invading Argives were driven far beyond the bounds of Theban territory. Creon's first act thereafter had been to publish an edict, forbidding on pain of death the burial of their brother Polynices. For her part, she had determined notwithstanding to do her duty. Will Ismene help, and show herself the true daughter of a noble race, or refuse and be a recreant to her lineage? Ismene stands amazed and horrorstricken at her sister's proposal. Are they, weak women, for whom it is as unbecoming as it is futile to war with men, to bring utter destruction on the house of which they are now the sole survivors, by braving the power of the laws and running into certain death? The full pulse of dramatic life and passion quickens even the Prologue of our poet—his opening exposition of the A few bold strokes bring out the contrasting figures of the sisters into sharp relief over against each other, along with the conflicting ethical elements embodied in them. On the one side we see sisterly love and piety, on the other maidenly shrinking from strife, and respect for law. To Antigone it is clear that her sister has been tried and found wanting, has made the great She will never more look for help from this weak sister, who is henceforth no sister of hers. For she at least has heard the trumpet call of a sovereign duty, whereby all lesser fears and scruples are overborne, and none is father or mother, brother or sister of hers who stands in the way of its fulfilment. Putting from her with contempt the timid counsels of Ismene to act at least with prudent reticence in the execution of this wild design, as well as all cheap protestations of affection, she quits the stage with a movement of queenly scorn. She goes by the door on the

<sup>\*</sup>See No. 2. Pages 147, 148, 150.

left towards the country-landscape, from which we infer that she is making for the place where her brother's body is lying. Ismene stands for a moment sunk in a strange mixture of feelings—horror of Antigone's recklessness, affection for her, and admiration of her uncompromising loyalty—then enters the palace, and so the stage is again empty.

At this point we hear the sound of a flute in marching time, and some brilliantly-coloured figures enter the passage on the right which leads to the Orchestra.\* That is the Chorus. They wear the masks of old and reverend-looking men, white shoes, robes rich in texture and colour, and golden or gilt crowns. They represent in this case the Elders of Thebes, the most prominent and venerable of the citizens summoned by the new ruler Creon to meet with him in council. They march past, preceded by the flute-player, fifteen in number in a formation of military regularity, three abreast. That one, nearest us in the front rank, is the leader or Coryphaeus. He is a most important personage, a potent factor in the success or failure of the play. It is his duty to give the singers their keynote, and the signs which direct their often extremely elaborate movements and evolutions. Besides he takes a great deal of dialogue both spoken and sung with the actors on the stage. When the chorus reach the Orchestra and take their places there, they change their formation with great precision so that they are now five abreast and three deep. a sign from the Coryphaeus they lift up their eyes and hands to the sun still well in the east, and in a burst of song hail his glad rays arisen upon their rescued father-land. They celebrate in splendid swinging rhythm, marvellously varied for expressive effect, the Theban victory, the crushing downfall of their Argive enemies, and give thanks to the gods in jubilant strains. song is accompanied by singularly graceful and significant gestures which bring vividly before our eyes the movement and pageantry of war, advance, retreat, tumult of battle and headlong We can see now how much the fate of the play must depend on the efficiency of the chorus. A new atmosphere of rapt and live enthusiasm diffuses itself over the audience as their song The poet has known well how to raise all the powers

<sup>\*</sup>Sec No. 2. Pages 142-43.

of his hearers through the magic of sight and sound to that heightened intensity which he requires for the full comprehension of his play.

After the opening ode has been rendered thus effectively, another sign from the Coryphaeus brings about a right wheel on the part of the chorus. They stand now with their backs to us and their faces to the stage. And now the Coryphaeus pointing to the open door of the palace gives us to understand that he sees Creon coming, expressing anxiety to know with what purpose he has called them the senators of Thebes together.

The mask of Creon pourtrays stern and haughty features with a deep frown on the brow. It has an enormously high upward prolongation, thick black hair and beard. The tunic is of royal purple with swelling bosom. He is attended by two armed men, wears a crown on his head, carries a richly-adorned staff of office, and looks every inch a tyrant. He has summoned the Elders of Thebes whose fidelity has ever steadfastly supported their rulers, to announce to them formally that it is to him they owe allegiance now, to declare to them the principles by which he means to rule, and to demand their co-operation in carrying out the recent edict—the first exemplification of these principles. "What is in a man," he says, "can never be known till his quality is tested by rule and law-giving. Whoever cleaves not to the best counsels when the welfare of a whole people is committed to his charge, the ruler who through fear or favour shrinks from prompt action when the general weal is imperilled, is but a poor caitiff. Creon will never be silent when he sees the state in danger, never will he regard as a personal friend the man who is an enemy to the fatherland. Our country is the ship that bears us safe and only when she sails with even keel can we make true friends." Creon is evidently an example of the homely truth that new brooms sweep clean. He is not going to permit any laxity under his regime. His watch-word is that "discipline must be maintained." excellent maxims of state are heartily applauded by the audience, but when he goes on to say that his recent edict is an application of these principles, his words are received with ominous silence. It is felt that there is more impious self-will and narrow-hearted pedantry than patriotism in gibbeting a helpless corpse for the

warning of traitors. The chorus too, though extremely respectful, are distinctly cold in their reception of their prince's intimation. Through their leader who speaks for them, they declare simply that Creon can do what seems good to him; he has absolute power to dispose as he will both of the living and of the dead. They are by no means anxious to assume any responsibility in connection with the decree. "They are too old to watch the corpse" they say. When the King tells them that this office has already as a matter of course been provided for, and goes on to press upon them not to side with the breakers of his law, if such there should be, they waive aside his urgency as superfluous seeing that no sane man will choose to include his own funeral in the burial of Polynices. Creon however who is tormented with the fixed idea of the rigid disciplinarian, and is ready to see a rebel in every bush, thinks it by no means impossible that a disaffected party in the town of whom he has long had his suspicions, might bribe some hardy wretch to strike a blow at his authority by risking death in disobeying his decree. To his narrow mind and cold heart no other motive suggests itself as possible. The thought of Antigone disobeying him in obedience to sisterly love and duty, never once occurs either to him or to

The conversation between the king and his councillors is now interrupted. By the door on the left—that is from the country outside of Thebes-enters one of the guards who had been set to watch the corpse. He is of quite mean appearance, dressed like a common man, though he carries a weapon; his mask is not prolonged upwards beyond the natural height, and his stage boots have quite small soles, so that he looks a very insignificant figure beside the towering Creon. He approaches with extreme and ludicrous reluctance. After a most deprecating obeisance, he goes on in a rambling way to say now how sorry he is to be here, how often he thought of turning back on the way, how unfortunate he is in being just the one of all the watchmen on whom the lot fell to come into this presence, till Creon, who has regarded him with lofty contempt and astonishment, at last angrily cuts him short, and bids him tell his story and be gone. Then at a gulp, looking behind him to see that the way is clear, the poor watchman blurts out his news. The corpse has received funeral honors.

It has been sprinkled with dust (enough in cases of necessity), and had the customary libations poured around it. Creon steps back a pace and roars a demand for particulars. The watchman has none to give except such as are totally irrelevant and concern himself, of which he is lavish. The deed, we gather, had been done in the night or early morning before the watch was set; the doer has left no trace of himself. In this mysterious event, the chorus whose secret doubts as to the edict have already been indicated by their cold reception of Creon's announcement of it, think they see the finger of heaven. The Gods perhaps have miraculously interfered to save the body from impious outrage. At such a suggestion, deprecatingly given as it is, Creon breaks out in towering wrath, in the excess of which we seem to see the influence of some lurking doubt whether it may not contain some truth. "What! the Gods interfere in behalf of him who came to burn their pillared shrines and sacred treasures with fire, to rout and ravage in their land and scatter its laws to the winds. Never! There has long been a party in this town who chafe beneath my yoke; they have bribed these wretched guards to do this thing. But by heaven they shall rue their filthy gains. Go back, miscreant; produce the guilty man before my eyes or else death alone shall not suffice for you and your fellows till hung up in chains ye reveal the whole truth about this outrage, so that henceforth ye may thieve with better knowledge whence lucre is to be won." After a ludicrous attempt to make the king hear reason, in which he shows a sweet rustic wit by fine distinctions and some quaint play on words, the watchman takes himself off, congratulating himself when Creon's back is turned that he has got away so cheap, and vowing that whether the criminal be found or not the king has seen the last of him.

The stage is now clear again and the chorus facing round to the audience give voice to the thoughts suggested by what has occurred in a wise and beautiful hymn. The daring and resource shown is disobeying the decree with its terrible sanctions lead them to reflect on the ingenuity of man who has conquered the wild forces of nature, made earth and sea and sky and all the creatures that people them his servants, invented language, political institutions and the comforts of settled and social life. "Yea he hath resource for all things man excellent in wit; without re-

source he meets nothing that must come. Only against death shall he call for aid in vain." Happy would he be if he were only as wise and humble as he is ingenious. But as it is, his fertile skill, cunning beyond fancy's dream, leads him to evil as often as to good. Too often, as in the case of this violated edict-with what motive violated the chorus do not yet know-it leads him to break through all barriers and run into fatal and impious collision with the overwhelming force of law and social order. The effect of this ode is to bring prominently before our minds the significance of the dramatic situation. The chorus has fulfilled one of its main functions. As the mouth-piece of the poet it has struck the key-note of appropriate reflection. We feel now the full gravity of the position in which Antigone has placed herself. Whatever be the motives of her act, it has certainly at least brought her into conflict with a fundamental force in human life, the force of organized society and positive law.

After singing this ode the chorus wheel round to the right again and once more face the stage. Hereupon their leader pointing to the country-landscape on the left, sees to his livelily indicated astonishment and dismay-Antigone, being led as a prisoner towards the palace courtyard. Next moment she appears, bound, in charge of our old friend the watchman. time his haste is as ludicrous as his tardiness was before. bustles forward dragging the maiden after him in evidently pleased excitement. "There she is," he says to the chorus with the air of a man who has cleared up a mystery. "She did the thing you wot of. But where is Creon?" Just as he is wanted, Creon happens to come out attended by his guards. He places himself on one side of Antigone; the watchman is on her other side. There she stands with her noble bearing, the great-hearted maiden between vulgar plebeian selfishness on the one hand and the insolence of self-willed power on the other.

"I'm back again!" says the Watchman, "though I vowed I should never come. There were no lots this time. No one but myself was going to have this lucky find. Here I bring you the maiden who was found doing honour to the corpse. Take and examine her for yourself. But declare me free of blame." Creon can scarcely believe his eyes. This is a quarter from which he

had not dreamt of opposition. His own ward—a woman! "What!" he says, "where and how did you find her?" "She was burying the man. That is all I have to say." "Do you understand what you say? Do you say what you mean?" "I saw her do it with my own eyes? Is that plain enough?" "But tell me, then, how you took her in the act?"

"It was this way. When I had gone back to the others and told them of your menaces, we went and swept away the dust with which the body had been covered, bared it well once more and sat down on a hill to windward of it. So we watched incit-This went on till miding one another to keep a good look out. day. Then came a sudden whirlwind filling the whole air with leaves and dust, so that we could see nothing. After it had cleared away, all eyes anxiously sought the body, and behold standing by it this maiden. She had evidently just come unseen and unseeing in the storm to find her work undone. With a sharp cry like a bird in pain who, returned to its nest, finds its brood all gone, she called down bitter curses on those who had done the cruel deed. Then she caught up handfuls of dust, had the body covered again in a trice, and from a fair ewer of brass held high she poured out three libations in due form. With that we rushed upon her. She made no attempt to deny her guilt. So I have brought her here-sorry indeed for her, but of course well pleased on the whole; for, you see, it is my nature always to look out first for number one."

During this recital Antigone had stood speechless, motionless with her head bowed wearily. She knew that Creon would never understand her. She knew the old senators would see in her simply a passionate and proud spirit—a woman who had gone out of her proper sphere. There was no eye to comfort, no hand to help. Turning angrily to her Creon demands if she admits the truth of what she has heard. She fully admits it. "You may go, then, where you will, free of a grave charge." The watchman goes. "Now," in a voice of thunder, "Tell me in one word, did you know of the edict proclaimed by me or not?" "Yes," says Antigone; "the whole town knew of it." "You dared, then, to disobey the laws?" "I did"—drawing herself to her full height, with a voice calm, full and clear like a

silver trumpet—"It was not Zeus that proclaimed that edict for me, not such are the laws set among men by the Justice that dwells with the Gods above. Nor did I deem that thy laws were of such force that a mortal could over-ride the unwritten and unfailing statutes of heaven. For their life is not of to-day nor yesterday—and no man knows the hour when they were first set forth. Not through dread of any human pride could I answer to the Gods for breaking these. That I must die I knew without thy edict. To die before my time is no such dread evil that for fear of it I should be false to my dead brother!"

Thus does the weak girl defy the tyrant to his face, strong in the might of love and faith—two powers against which the gates of hell have never yet prevailed and never shall.

On Creon's iron pride and narrow mind her words are lost She and her sister Ismene shall both die. Ismene however comes upon the stage, and he discovers that she is innocent of disobed-To her he then softens, but will not listen to her when she pleads for the life of her dear sister, without whom to live is worse for her than death. "What," says Ismene, making a final appeal, "Will you slay your son's bride?" Antigone, it appears, then, is affianced to Haemon-Creon's son. "There are other woman in the world, good store," says the tyrant: "I like not a bad wife for my son." "Dearest Haemon," exclaims Antigone, "how thy father wrongs thy heart." During the dialogue between her sister and Creon, she has stood by in silence, not deigning to bestow upon her judge one word. But this last brutal taunt opens the flood gates of wounded love. In one passionate cry—the sole sign of the undreamt of depths of tenderness in her nature, which her proud self-control suffers to escape her, we see that she has made the sorest, the final sacrifice to duty—the sacrifice of her sweet maiden dreams. When she hears Creon coldly speculating on his son's marriage, as an insignificant detail that admits of solutions enough and to spare—she who knows the heart of her betrothed, incapable of falsehood to her, incapable of making any choice but one, cannot maintain her proud silence any longer "Beloved Haemon," she cries, "how deeply thy father wrongs thy heart!" She is right. Haemon soon appears, wearing the mask which the conventions of the stage assign to lovers—with black hair and pale

complexion. He is in evident distraction. At first he restrains himself, addresses the old man with studied and profound humility, insinuating his arguments for mercy to his bride under the guise of good policy and solicitude for his father's reputation among the burghers of Thebes, who, as he says are with one voice enthusiastically on the side of the pious maiden. But the anger and stinging taunts of the old man, when once he perceives his son's drift, drive the latter finally into repaying harsh words in kind. A scene of the most lively dramatic interest with its crescendo of rising passion, ends at last, in Haemon's flinging off the the stage with the threat that this father shall see his face never more.

When he is gone Creon in reply to the question of the Chorus, informs us what fate he destines for Antigone. A moment ago he had said he should slay her before her bridegroom's face. Now he is cooler. She is to be led to a lonely place, and entomb. ed in a rocky vault, where just so much food is to be given her as shall be ceremonially sufficient to avoid pollution upon Thebes. Thus vainly, thus significantly does the self-willed old man palter with his conscience. His cruel resolution has unknown to him, received some hard shocks, although as yet the effect has merely been a more fiercely boiling wrath, a more exasperated tenacity. His pride cannot brook to be foiled by a woman, yet that obscure voices whisper within him to pause and walk warily, is unmistakeably shown by these elaborate precautions. What a subtle touch of nature is given us here, by the close fine workmanship of our matchless poet. How many, too, in all ages have thus tithed mint and anise rue and cummin, with the most scrupulous avoidance of ceremonial uncleanness, while their hearts were foul and their hands red with innocent blood.

But Creon finds that God is not mocked. No sooner has Antigone been led away to her lonely and slow death, deserted even as the Holiest was in her last hour, her very faith in the Gods, strong and glad as it was, chilled before the freezing shadow of that sunless living tomb, but with two stars still shining for her in the midnight blackness, Love and Duty—no sooner is she gone than Teiresias, the blind old seer, whose word has never yet proved false in Thebes, appears, and warns the King to

desist, commands him in Apollo's name forthwith to free the righteous maiden and bury the outraged body with all honour. If he fail, then doom and woe await him, and that straightway. Creon's anger now bursts all bounds. He shrieks out sheer blasphemies which make our blood rnn cold. Though his own eagles carry the fragments of the corpse before the throne of Zeus, yet will I never bury it." It is but the last fierce flare of his selfwill. When Teiresias has gone, the persuasions of the Chorus, now at last fully convinced that Antigone was in the right, prevail upon him. The high fortress of his adamantine pride crumbles into the dust. He hastens away with his own hands to undo his own work. But it is too late. A messenger comes upon the stage and tells us how Creon went to Antigone's tomb, heard a voice of wailing at the entrance of the cave, hurried forward to see an awful sight--Antigone strangled by her own hand, and at her side her despairing lover, his own son, clasping the cold body in his arms. When the old broken man piteously called upon his name, the young man leapt up with the last spring of a wounded lion, drew his sword and madly ran at his father. Missing his aim, with a sudden frenzied revulsion of feeling he plunged the blade in his own heart and fell upon the body of his dead love, crimsoning it with his blood. The wife of Creon has heard this woeful tale. Without a word she enters the palace. Next moment Creon comes bearing a sad burden his son's body. His cup is not yet full. A servant comes to tell us that his wife has done herself to death cursing him with her last sighs. Behold his house is left unto him desolate.

"Wisdom" sings the chorus as they march out, "is the supreme part of happiness. Reverence to the gods must be inviolate. Great words of prideful men are ever punished with great blows and wisdom's lesson is learnt at last."

On this stage we have witnessed not the mere conflict of human wills, but behind these the conflict of two great elements in the moral life of humanity. On the one hand there is the power of organized society embodied in Creon—the ruler, as his name means, the visible depositary of a force august, indeed, and venerable, rooted in the divine constitution of things, but not seldom coming into collision with the individual conscience in

cases where the latter is the fuller expression of the Universal-Reason. On the other hand there is that yet higher, diviner power which speaks to each man directly in the depths of his true self, and points him the way that he must go, if he is to live at peace with God and his own soul. The first of these two powers has a voice of terror to which no one can wholly turn a deaf ear; the second has but a still small voice, and few there be that hear it, but to these chosen few the clear tones of its quiet insistence prevail over the coarse thunders of the louder voice. These are the men and women of Faith; to whom the things that are seen are temporal the things that are unseen eternal.

Of such is Antigone. The thought of all she must dare, and suffer and forego, cannot make her false to the clear inward light. Her brother's body lies unburied. Like a naked child in the darkness, his unhoused wretched spirit wails in the under-world with bitter complaints against her neglect. She hears these cries, because the ears of her spirit are not stopped; they will ring in her heart till she dies. At all costs she must quiet the importu-"But," urges the tempter with fair-seeming nate tumult. sophistry, "will she then be called a breaker of the law?" Antigone is no rebel; there is no perverse itching in her blood to measure herself against the force of authority. To break the law is a grievous thing for her. But if she be a breaker of the law, it is only of the lower in obedience to the higher; therefore at worst she shall be a "sinless criminal." Nay, not even so much as that: for this which she breaks is no law; it is not the voice of Thebes; it is after all but the empty breath of an impious and foolish man so vain of his dress of little brief authority as to think that he can override the primal charities of the soul, the unwritten and unfailing statutes of heaven. Must she then die? whispers the treacherous voice within her once more-she so young and so unwearied while life whose dearest joys she has not tasted vet, might still be so sweet to her. Must the darkness close around her before ever she has seen the dawn of her bridal morning? Yes, she will even die rather than be false. Death must come soon or late, in any case. Soon or late she must join her dear ones, stretched so long on the rack of this tough world, but now at rest-her blind old father whose exiled steps she had guided with such patient ministry, her unhappy mother, and her two ill-fated brothers, friends now surely in that land where all earthly strife is hushed. They shall welcome and commend her, they with whom she must dwell for ever. It matters little, then, what men shall say of her. Beyond such short-lived clamour, she sees and makes her appeal to the Tribunal in the still Eternity.

Using the expression of the man who reflected most deeply and sympathetically on the noble art whose purest and most pathetic exemplar we have just witnessed, we may say that the terror and pity, which have shaken and melted our souls in the moving scenes and passionate music of this drama, have been truly of a purifying and ennobling kind. We rise subdued indeed and concentrated, but with a joyous sense of expanded power; a loftier assurance of the divinity of our common nature. then no mere dream that there is an Infinite in man. It is given to him to follow duty in war with principalities and powers and spiritual wickedness set in high places, though he be alone, without applause or sympathy, stumbling onwards with energies flagging and benumbed in the chill shadow of death, where all other lights are lost; yes the very face of God. "Tasks in hours of insight willed, Can be through days of gloom fulfilled." For a little while we have left the poor corner in which our daily life is passed, with its weak unworthy pity of ourselves and others, its sordid fears. Borne up on the strong wings of the poet we have walked in high and holy places. The immeasurable heavens with their steadfast stars have opened above us; and glimpses have come to us of the deep hidden pillars of the world, so hidden, yet so real, the irrefragable divine laws, "the unwritten and unfailing statutes of heaven."

## THE EARTH, AND THE PHYSICAL UNIVERSE.

#### BY N. F. DUPUIS.

THE past duration of this earth, and in fact that of the sun and of the whole solar system, for these are necessarily very intimately connected, form at the present day a sort of battle ground between the experimental physicist on the one side and the geologist and the biologist upon the other. This battle has been carried on for some years past, and it does not appear that victory as yet inclines very decidedly to either side. And it is quite possible, nay, it is almost certain that no reconciliation can ever take place between the views of the contending parties unless some of the generally received doctrines in regard to the forces of the universe, or at least in regard to their modes of action undergo a very material change.

The physicist and the geologist both to some extent pursue their investigations along the same lines, and base their arguments upon the same foundation. They both draw their conclusions partly from things as they appear to be now, and partly from assumptions as to what they were in the far distant past. Both assume the unchangeability of the laws of the universe, and both believe in a uniform application of these laws throughout all time and space, admitting of course, that intensity of action must always be a function of co-existent conditions. And yet their conclusions are so very different as to be altogether irreconcilable upon any theory of accidental oversight in consideration or enumeration of the almost endless variety of energies which come into play.

The physicist says that this earth cannot be above 10 millions or even 8 millions of years old, and that it is probably not more than 4 or 5 millions of years, or possibly less, since it became fitted to be the home of living things. The geologists, upon the other hand, and along with them must be counted the biologists, have claimed as a necessary duration of this earth since the oldest geologic age, a period embracing all the way from over 600 millions of years to one of 4 or 5 millions.

The physicist may be said to have the best of the argument in one respect, namely, that all physicists are pretty well agreed as to the duration of the earth, while the geologists are as wide asunder as the poles. This however is largely due to the fact that the data upon which the physicist forms his conclusion are almost infinitely less complex than those which fall to the lot of the geologist, and that as a consequence there is less opportunity for wild speculation, and flights of the imagination in the former case than in the latter.

On the other hand, while the physicist depends upon the laws of nature as he sees them manifested and understands them now, and, upon the assumption of the uniform operation of these laws throughout the millions of years that are gone, an assumption which may possibly be very far from the truth, the geologist has continually spread out before him the infallible and unchangeable record of the past, written in the rocks and everlasting hills. The great book of the history of all past terrestrial change lies open at our feet, but its language is so strange and unfamiliar, and there are so many elisions, so many breaks in the record, here a word left out, and there a whole sentence, and there are so many ways of filling in the omissions, so many interpretations that can be given to almost every complete or incomplete sentence, so much uncertainty in regard to the meanings of things which transpired millions of years ago, that the geologists may well be excused if individual ones differ extremely at times in their interpretation of this written record; and as far as I am aware the leading geologists, with few exceptions, are not willing to accept anything like so short a life-period of the earth as the physicist is willing to grant to them. To present as fair a view as I can of the arguments upon both sides of this disputed question, and to advance a speculation. which might possibly be true, and which if true would be a means of reconciling these very great discrepancies, is the object of this article.

The arguments of the physicist are founded chiefly upon the known laws of Thermodynamics.

The universe is constituted of matter and energy; even life is possibly some occult form of energy, occult, because we are not certainly acquainted as yet with the laws of its transformations.

### THE EARTH, AND THE PHYSICAL UNIVERSE. 281

As to the real and ultimate nature of matter we know but little, probably almost nothing accurately. But all observation and experiment, chemical and physical go to prove that matter is indestructible and therefore in all probability eternal, at least we must hold this until some cogent reason appears for holding the opposite, and that matter is certainly possessed of at least one inherent property, that of gravitation, or the property of attracting other portions of matter and of being attracted by them.

All changes taking place in the matter of the universe, or in its configuration, whether here or in the distant stars, are due to forms or modes of action of energy, such as attraction, repulsion, radiant energy, heat, electricity, etc.

The energy of the universe, however it may be changed from form to form, is, upon the whole, unchanged in amount. But it has a tendency to undergo a transformation into heat as its final and most widely diffused form.

Matter in motion is one of the commonest examples of kinetic energy. This motion cannot be destroyed except by opposing to it some form of resistance, and the apparent destruction is only the transformation of the energy belonging to it into some other form of energy, usually heat.

The coal which burns in the furnace of the boiler gives off heat by its combustion. This heat is due to the falling together of the minute constituent particles of the coal and those of the oxygen of the air which passes over and through the burning fuel. Here we have an example of heat being evolved by mechanical action, usually called chemical, between the constituent particles of certain forms of matter. All combustion comes under this head, for in all cases combustion is the union of particles which were previously discrete.

The heat acts upon the water in the boiler to drive its particles asunder, to change the water into a gas, and thus to give us energy in the form of the expansive power of steam. This expansive force moves the machinery of the engine, and we have here come to mechanical motion, not confined to a few particles, but to great concrete masses of particles.

The engine drives the dynamo, and the resistance experienced by the armature in revolving in a magnetic field is transformed into that particular kind of energy which is known as a current of electricity, for this name will answer as well as any.

The electricity is carried along the trolley wire, separated from its home in the great body of the earth beneath by the intervening air. In the particular location required it passes down through the motor of the car and developes again mechanical power in the form of a moving mass, or being passed through the Edison lamp, becomes light and heat; although, light, being merely a subjective phenomenon has really no business in this sketch of energy transformations. And what finally becomes of the energy of the moving car? Some small amount of it may reappear as electricity or magnetism in the wheels and iron rails, but the great mass of it is changed into heat, by friction on the surrounding air, and in other ways, and this heat, so far as we can at present see, is lost forever by being radiated and dissipated into the boundless regions of surrounding space.

When the blacksmith's hammer falls upon the anvil the motion of the hammer is destroyed, and its energy as a moving mass is transformed into heat; and it is well known to almost every one, that a piece of iron can be quite strongly heated by beating it with a hammer upon an anvil. So also every raindrop and snowflake that falls to the earth imparts its quota of heat to the surrounding air. So every meteor which leaves it fiery trail for a few moments athwart the sky is a visual and vivid illustration of the conversion of motion into heat. The meteor meets the earth's atmosphere at a great height, and with a velocity anywhere from 20 to 50 miles a second. To a body moving with such speed even the higher and rarefied portions of the atmosphere offer a powerful resistance which rapidly changes the motion of the meteor into heat. The whole mass fuses, and, if small enough, becomes dissipated into a glowing vapor, and leaves a fiery track of ashes to mark its path, or if of considerable size, it may burst into many pieces with a cannon's noise, and its several parts fall to the ground and bury themselves to a greater or less depth therein.

The relation between the destruction of motion in a moving body, and the resulting generation of heat, has been most carefully, and experimentally worked out by the leading physicists of

283

the century, among whose names that of the late Mr. Joule must ever hold a prominent position. It has been shown, with a very small probability of error, that if a pound of any heavy matter, such as lead or iron, etc., be allowed to fall freely through 772 feet at any place near the earth's surface, the amount of heat generated by the destruction of the motion, is just sufficient to raise one pound of water through one degree of temperature on Fahrenheit's scale, or, in other words, if 180 pounds of matter should fall under the same conditions, sufficient heat would be generated to raise a pound of water from the temperature of freezing to that of boiling.

Now a fall from a height of 772 feet, means a velocity of about 223 feet per second, so that a body moving with this velocity has sufficient energy if it be of iron, to raise its own temperature through about nine degrees F. and if it be of lead, through about 32 degrees F. Finally, if this earth could meet a solid body at rest, the rise of temperature due to the concussion would be somewhere near 600,000 degrees, a temperature many times greater than any ever produced by artificial means. And thus when we know the velocity at which a body is moving, we know the rise in temperature which would be effected by the destruction of its motion by collision with some other body.

In the immensity of spatial depths, the telescope reveals to us great numbers of small, faintly luminous and hazy spots, of various sizes, and of various shapes, usually illy defined in outline but clearly distinguished from the single stars in appearance. These glow with a very faint and uncertain light like minute comets, and instead of being apparent points like all the fixed stars, they have in general a pretty distinct and fixed form which may be quite regular, as circular, elliptical, etc., or which may be very irregular as in the great nebula of Orion.

By means of powerful telescopes and also by the spectroscope some of these have been shown to be nothing but clusters of an immense number of apparently minute stars, so extremely distant as to be altogether invisible except in the largest and best of telescopes, and so crowded in space that their combined light causes them to appear as a faint nebulous spot. The majority of these comet like bodies, however, have never been resolved into stars, and we have reason to believe, from spectroscopic re-

searches, that no possible telescopic power would be sufficient for such a resolution. These form the true nebulae.

We do not know the distance of any one of the nebulae, but they are in all probability more distant than the nearest fixed star, and possibly thousands of times more distant; and the nearest fixed star is more than 20,000,000,000,000 miles distant, and no other star is within about double that distance.

Of the real extent of a nebula then, we can form no idea, for the extent is a function of the distance, but the smallest observable nebula must be millions of times more extensive than the whole solar system.

It is believed by many astronomers that to a person placed so far distant that our sun would appear as a star, it would also appear to be surrounded by a faint nebula, inasmuch as something like a nebulous haze, known as the zodiacal light, is apparent, as a constant attendant upon the sun, even to dwellers on the earth. The true nebula consists of cosmic matter, which is the stuff from which comets are formed, and which is in all probability the crude material from which this solar system, and other suns and planetary attendants have been, and are being built up.

We know something of the nature of this cosmic matter, as a considerable portion of it falls to our earth from year to year out of surrounding space, and sometimes in quite large masses, forming meteoric stones.

As far as we understand its nature a nebula is a cosmic cloud consisting of an incalculable number of particles of solid matter, just as, on an infinitely smaller scale, a storm cloud consists of innumerable particles of minute water drops. The particles which go to form the cosmic cloud may range all the way from dust grains to metallic or semi-metallic masses of pounds or tons in weight, the particles being, on the average, exceedingly far apart in proportion to their size.

There is not the smallest reason for believing that in these distant regions of the universe the properties of matter are in any way different from what they are with us. But detached portions of matter cannot remain at rest in space. Motion is the great law of the universe. Everything from the constituent molecule to the astral system is in incessant motion. The parts of the

cosmic cloud attract one another with forces varying inversely as the squares of the distances between them, and directly as their Hence every particle great or small must pursue some kind of an orbit due to all the attractions acting upon it. orbit must, under the circumstances, be in the main most singularly complex, the orbit of one particle being possibly very different from those of other particles. Owing to this irregularity of movement, these moving bodies must sometimes come into one another's way and collisions must take place. But the destruction of motion by the collision produces heat, and probably some parts, at least, of the colliding masses are torn off and so strongly heated as to be gasified and form a glowing vapor, to which the faint luminosity of the nebula is due. This vapor would, unless under certain circumstances, cool and condense more or less rapidly into a small portion of cosmic dust. The rapidity of cooling would depend upon the state of condensation of the nebula, and under a fairly condensed state the heat so formed would go on increasing, instead of decreasing, and the nebulous mass would gradually grow hotter and brighter.

But the collision would have another effect. The colliding bodies being checked in their motions would yield more readily to the central attraction of the whole mass of the nebula, and be thus drawn inward to pursue a diminished and possibly a more irregular orbit, besides becoming a sort of stumbling block to other particles.

The consequence would be a slow gathering inwards of all the particles of the great nebular mass, a sort of condensation, which, by increasing the frequency of collisions would increase the amount of heat developed and thus raise the temperature of the nebula while decreasing the distances between its constituent parts. But this decrease of intervening distances, this falling in of particles from the outer parts of the great cloud to positions nearer to the centre, must, according to the mechanical theory of heat, produce a constant rise in temperature, a rise which must depend, among other things, upon the distance through which the particle has fallen. And thus after a very long time, a time so long as to transcend man's powers of comprehension, the great nebulae of the universe must one after another grow hotter and brighter, and more circumscribed in extent, until their constituent

particles finally come into that form which we know as a central sun and its retinue of attendant planets. Or possibly in some cases of irregular nebulae, there may be two or more centres of condensation giving rise to two or more suns which revolve about one another, as is actually to be seen among the mechanical wonders of the heavens.

Such is believed to have been the origin of our solar system, the sun representing the main bulk of the primitive nebula, and the planets being parts which were gradually left behind in the great gathering in.

And thus the heat of our sun is but the transformed mechanical energy due to the falling in, towards a common central mass, of the innumerable hosts of bodies great and small which at some time in the distant past were scattered throughout the wide extent of a diffused nebulous cloud.

But heat is a measurable quantity. And we know the mass of the sun measured in our customary standard units, and hence the amount of heat generated by the great in-falling of the original nebular mass is determinable to a fair and practicable degree of approximation, the result of the determination being probably in excess rather than in defect. Also we know, even to a closer degree of approximation, the rate at which the sun is at present giving off its heat, and thus the question as to how long the sun has been giving out heat, at its present rate, or how long it can continue to do so, is to some extent a mere question of receipt and expenditure.

Reasoning along these lines, leading physicists have arrived at the conclusion that the sun has not been giving off heat for a probable period of over twenty million years since our earth became an independent globe, and possibly for a period of not more than ten or even eight or six million years, since the earth became inhabitable and inhabited. And thus the physicist practically says to the Geologist and to the Biologist, if our physical theory is correct, and we see no reason for believing otherwise, then all the great changes which have left their history in the earth's crust, the stratifications, and denudations, and upheavals, and all the development in plants and animals, and all extremes of evolution and variation, must have taken place within the last five or six million years.

There is no assurance, that the assumption that the sun has been giving off its heat at a uniform rate during long past ages, is correct, but no reasonable amount of variation in this rate could lengthen out the time allowed by the physicist into anything like that necessary, or said to be necessary by the average geologist. However, it may be worth while to enquire briefly into the probable condition of the sun.

According to Lardner and Dunkin the attraction at the surface of the sun is about 28.6 times as great as the attraction at the surface of the earth; that is to say that a man who weighs 150 pounds upon the earth would weigh 4,290 pounds, or over two tons at the surface of the sun, and would thus be literally crushed to death by his own weight. One would naturally suppose then that this powerful attraction exerted on all solar matter would compress it to a wonderful extent and thus raise the mean density of the sun far above that of the average material of this globe. The very reverse is however the case, for the mean density of the sun, instead of being greater than that of the earth, is only about one-fourth as great; so that a cubic foot of average material taken from the earth is as heavy as four cubic feet of average material from the body of the sun. What explanation can be given of this unexpected comparative result?

It follows then that no great portion of the sun can be solid or even liquid, for the specific weight of any substance, with which we are acquainted, is not much different in its liquid state from what it is in its solid state. But if we assume that only a comparatively small portion of the sun is in either or both of these states, it follows that a very great portion of the sun must be in the gaseous state. It is, however, difficult to conceive how an atmosphere consisting to a considerable extent of the gasified forms of heavy metals like iron and nickel should have a height of some hundreds of thousands of miles, and yet not be compressed into a liquid by its own superincumbent weight.

We know as a fact that under our conditions of life there is a critical point for every gas; that is a temperature above which no pressure that we can bring to bear upon the gas will convert it into the liquid state. If while under this pressure the temperature be gradually lowered until the critical point is passed, the gas in

a very peculiar way passes into a liquid filling something like one-half or one-third the original bulk. But what are the little pressures and temperatures which we are able to command as compared to those which must exist in the interior of the sun. And yet it would seem that a condition something like that now described must be present in the solar mass.

It is probable then that the sun's temperature is so high as not only to keep every portion of matter in a gasified state, but to absolutely prevent anything like chemical union. So that all the elements of the chemist must exist uncombined, in the body and in the atmosphere of the sun, and certainly some, and possibly many of these so called elements exist in a state of decomposition into simpler constituents, either known or unknown.

This view of the matter, and no other one appears to be compatible with observed facts, makes the sun to be a great sphere of gas about 800,000 miles in diameter, in which all our most refractory substances are held in the gaseous state, and at a temperature so high as to be far above the critical point of the most readily condensible of these gases.

Now if this is so, then it has been shown by Mr. Lane that the sun in contracting will, as long as it retains its gaseous form, grow hotter instead of cooler. So that upon this theory of its constitution the sun did not give off its heat at a faster rate or even at the same rate several million years ago as it is doing now, but probably at a much slower rate. This supposition would of course tend to lengthen the time during which the sun has been supplying heat to the planets of the solar system.

If, as is generally believed, the earth were intrinsically hotter several million years ago than it is now, it could maintain a temperature fit to support life on its surface with less assistance from the sun than at present; and as the earth gradually grew cooler by giving off its central heat, so the sun grew hotter by its own contraction, and thus the surface temperature of the earth might remain very much the same for a very great length of time.

This might lengthen considerably the period during which the earth has been the home of living things, but it could not extend the time to anything like two or three hundred millions of years.

# DOES HISTORICAL CRITICISM DO VIOLENCE TO SPECIAL REVELATION?

IT is claimed by "higher critics" that we must read Holy Scripture, as we read other literature, in the light of human development revealed in history; that the different books of the Bible must be received in their historic setting; that the doctrinal contents of these books must be put in proper historical perspective; and that due allowance must be made for the temporary influences which, from time to time, magnified special phases of truth out of due proportion, or even incorporated into Scripture conceptions and regulations which were local and temporary, but which are now of little more than antiquarian interest.

On the other hand, it is claimed by those who are styled the "orthodox party" that Holy Scripture cannot be thus placed on the same level with other literature, and subjected to the same canons of historical and speculative criticism. The Bible, they hold, is a wholly unique book, in that it is not the product of the human mind, but embodies a special revelation of God to the human consciousness, or contains truths which man could never have attained by means of his own unaided reason.

If any lasting reconciliation is to be attained between these two parties, it must be through such a common understanding regarding the meaning of special revelation, on the one hand, and the legitimate sweep of the methods of historical and speculative criticism on the other, as will do no violence to the essential worth of either. This understanding must allow for the Divine worth of either. This understanding must allow scope for Inspiration of the writers, and at the same time allow scope for the reflective spirit of readers and interpreters to bring the content of the special revelation into harmonious unity with other phases of human experience. The devout mind has a right to reject such criticism as will not allow for the Divine Inspiration of the sacred writers; while the equally earnest reflective student has the same right to demand relief from such a conception of the authority of Revelation, as would destroy the possibility either of

ascertaining exactly what the inspired writers themselves said, or of distinguishing between the essential spirit of their message and the temporary form and mould given to it by the spirit of different ages.

Hence we must look for such a relation between the knowledge we have acquired through the common activities of the human mind, and those intimations and intuitions received from the Divine mind, as will make it possible to bring both into the same web of human experience. This can be done only by looking for the conditions involved in our possibility of knowing anything.

If Special Revelation means anything for us at all, it must mean revelation to human consciousness, no matter how we may disagree as to the method by which it comes, and its likeness or unlikeness to "Ordinary Revelation" or the faculty to which it appeals. If we hold that it appeals to faith as distinguished from reason, and is "spiritual" as contrasted with "intellectual," we must at least presuppose such a unity between faith and reason, between our spiritual and intellectual faculties, as will allow the Special Revelation to influence us in our distinctively human activities.

If we hold that, to be Divine, a revelation must come in a supernatural way, in the sense that we can never account for it adequately, as we can trace the causal connection between natural events, we must at least affirm, that, although its origin is inscrutable, its content must be capable of becoming a part of human knowledge.

And since by Special Revelation we mean a revelation to man, we certainly imply that it must be translated into the language of man's consciousness. This is the same as saying that it must conform to the conditions of human knowledge. Even its inscrutable origin cannot obviate the necessity of its conforming to those conditions without which we could know nothing.

"But," it may be asked, "have we a right to speak of possibility or impossibility with reference to God?" A little consideration will, I think, make it plain that we must so speak, in spite of the fact that in a sense "all things are possible with God."

Scarcely anyone would consider it impiety to say that it is impossible for God to make two straight lines enclose a space. Even

though Supernatural power could so operate upon the human mind as to produce a state of consciousness in which two straight lines might be seen to enclose a space, it would imply such a change in our faculty of knowledge as would destroy the identity of the knowing subject. It would imply such a break in his experience, as would destroy his identity as the same subject in his different experiences. Consequently the knowledge which he would attain in such a supernatural state, could not be carried into his normal If the possibility of making two consciousness as a natural man. straight lines enclose a space, therefore, would destroy the identity of the subject of knowledge, as he passed from the supposed experience in which "all things are possible" to the normal experience in which the contradictory is impossible, we are justified in saying that not even the Supreme Being can give such a revelation to human beings. It is only that revelation therefore which is possible to human consciousness, as we know human consciousness to be, that we have any right to speak positively about; for even when we speak of "Special" Revelation, we must mean such a revelation as conforms to the conditions of human knowledge.

It would thus seem that we are justified in saying not merely that there are things in connection with Special Revelation which can be pronounced impossible without the implication of any limitation of God's true character, but that there is one necessary condition at least to which Special Revelation must conform in order to be a Revelation for us. That condition is, that Special Revelation must not make an absolute break in the unity of the consciousness to which it is given.

If this first principle is ignored, the supernatural must be separated from the natural; and as the Divine mind will be restricted in its influence on man to his non-rational states, it cannot influence him in any of those activities in which he is essentially a man. And the condition, necessary in order that the influences of times of spiritual elevation should permeate the whole life and thought of the individual, must not be ignored if the inspired individual in turn is to influence the race. Inspiration must not so destroy the unity of consciousness, underlying separateness of personality among men, as to destroy that communication of mind with mind by which we are able to learn from one another. We can find an analogy in poetic inspiration. The true poet's glimpse

into what Goethe calls "the open secret" of the universe, is always in a measure inscrutable even to himself. Inscrutable indeed to others is the flight of his soul, inasmuch as they are incapable of the same vision except through him as a medium. But presented in the "rapt unreasoned form of poetic utterance," and not professing to do more than represent one of the individual poet's moods, it is welcomed by reflecting men as appealing to latent faculties of their own, and as capable of being translated, in a measure at least, into their more tedious language of logical reflection. This is what Carlyle means when he says that "a vein of poetry exists in the hearts of all men", and that "we are all poets when we read a poet well." The inscrutability of poetic flight, therefore, like the Divine inspiration of the prophet, must not so separate him from his fellow mortals, that they shall not be able to catch his fire, to feel its glow in their own bosoms, and to body it forth in their own more prosaic forms of thought.

So we may lay down as our first principle, that by Special Revelation we must not understand such a revelation as by its process of entering the human consciousness would destroy the identity of the subject of revelation either in the individual or in the race. That is, Divine Inspiration must not so destroy the unity of the personality of the subject, as to prevent his bringing the new truth into his ordinary consciousness, and into such relation to his ordinary experience, that both "special" and "ordinary" revelations may become parts of one organic whole. Otherwise the influences of the Mount of Transfiguration could never elevate and stimulate life in the world below; and the beatific vision could never become the heritage of those who had never themselves been specially led apart by the Divine Hand up the high mountain.

Thus even though we believe that the "holy men of God who spake as they were moved by the Holy Ghost," came into a peculiarly close contact with God, we see that there are conditions of human knowledge which must have been fulfilled in them before the message could have had any meaning for themselves, or could have been passed down to us. And the condition we have pointed to, that Divine Inspiration could not destroy the unity of experience in the inspired man, lying as it does at the basis of all knowledge, depends on no uncertainty of experience, or no dubious

historical testimony, but is a fundamental principle which all must admit no matter how great the separation which they make between "ordinary" and "special" Revelation.

But let us now see what our position implies on the part of the content of Special Revelation. Identity of the subject means continuity of experience and therefore cannot admit of explicit contradictions in the material of his knowledge. So we come to a second principle, that Special Revelation must not contain explicit contradictions, either within itself, or in its relation to our ordinary experience. That is, both Special and Ordinary Revelation must be of such a nature as to allow the subject to look upon both as parts of his personal experience. If two separate visions absolutely contradicted each other, or if the content of his vision contradicted all that he was most certain of in ordinary experience, he could not really believe both. No Supernatural Revelation, for example, can convince us that the same conduct is both right and wrong under the same conditions and with reference to the same thing. To admit such would be to admit the total imbecility of our God-given faculty of knowing; and the supreme good would be deliverance from the desire to know anything. All who assert anything, including those who make a denial, assume implicitly the possibility of knowledge. But how can we call that knowledge which may at any time be totally withdrawn by a Revelation from God? True "we know only in part," but there must be a "part" at least which is absolutely true and which no Supernatural Revelation can overthrow.

Of course this is not to be understood as an assertion that we learn nothing which is not at once seen to be in perfect harmony with past experience. We do not in everything learn by the logical method by which we proceed from the conception of a straight line to the truth that two such lines cannot enclose a space. The conception of God as a "magnified man," for example, may be satisfactory to an unreflective man who never thinks of bringing this conception into consistent relation with the thought of Him as Omnipresent.

In poetry, in art, in morality as well as in religion, new gleams of truth, new demands of duty and new aspirations come in upon us, and powerfully influence us before we are able to trace minutely the connections between the new and old, or see their

implied elements of harmony or contradiction. But when once a clash has taken place in experience, or when cool reflection has raised the question of the consistency of the new and old knowledge, no mental rest and no long-sustained serious moral endeavor can exist until the apparent contradictions are removed.

Nor does this harmonizing process necessitate definite and explicit knowledge of all that is contained in the new and old phases of knowledge, or a complete grasp of their mutual relations. We can never fully trace the origin of a thought, or say absolutely that a man is the product of his time. Thus we have constantly to pause as we touch the Supernatural. But so far as we do go, in reducing the facts of our experience to systematic order and definiteness, we can admit no explicit contradictions. Hence we must reverse the method too often followed in dealing with the content of Holy Scripture: instead of refusing to attempt to solve apparent contradictions because we believe them to be contained in Divine Revelation, we must assume that the apparent contradiction is due to our inadequate point of view, and make every effort to get a point of view from which we can see the consistent harmony of the essential truth in both. Consequently when we approach Holy Scripture we must assume that it is essentially harmonious, that we are able to understand the mind of God, and that the evidence of the truth is not the inscrutability of its origin or the mere fact that it has a place in the Sacred Canon. We must look for other more reliable principles of interpretation than our subjective impressions, and for a more infallible guide in their application to life than the authority of any Chnrch or creed.

Once more let us take a definite example, in order to illustrate the application of our principle, as well as to make it more precise and specific. If Paul was certain of anything it was that the Gospel he preached was not from man but a Divine Revelation. He frequently refers to the theophany which appeared to him on the way to Damascus. Yet he does not make the inscrutable nature of the vision his sole criterion of its Divine nature, or the guarantee that it could never be supplanted by another Gospel. He says to the Galatians (ch. 1:8): "Though we or an angel from Heaven preach any other Gospel unto you, than that which we

have preached unto you, let him be anothema." If the inscrutable circumstances connected with the first dawn of the truth in his mind had been his sole guarantee of its absolute truthfulness, he could not assert that not even "an angel from Heaven" could supplant it.

What then must have been the criterion of the truth in Paul's mind? If the miracle was not the witness to the truth, it must have been the nature of the new truth itself. And this is not surprising when we realize how little the impressions of our senses have to do in producing our profoundest convictions. Visible appearance is almost nothing as compared with the eviappearance of reality which comes through reflective comparison with the rest of our experience. No Supernatural messenger could convince a sane man that an immoral act would be right. Hence it must have been the feeling that the new Gospel included in its spirit all that was good in the old and at the same time transcended it, which confirmed the Supernatural Revelation vouchsafed to Paul on his way to Damascus.

And it is the more certain that Paul's criterion of the Divine nature of the new truth was its internal evidence, and not its external accompaniments, when we remember that the new Gospel which not even another supernatural messenger could supplant, was itself a supplanter of many details and forms in the old dispensation which he also considered divine. His whole argument against Judaism is based upon the principle of development. Law and rite and ceremony had served their day. Having passed the stage of tutelage man was now to be freed from external authority, and governed by the truth itself which would make him free. Without the conviction that Special Revelation was accommodated to human development the relation of the old and new revelations would have been that of contradiction. But in the light of development the new became at once the supplanter and fulfilment of But Paul could never have become the medium of such a new revelation had he estimated truth merely because of its external miraculous attestors. These had to be subordinated to his judgment of the power of the revelation to meet the want of his time.

And so we come to our third principle: although we believe in Special Revelation, we are not to look for its infallible test in the

inscrutable circumstances of its origin, so much as in its transcendent power of meeting the truest need of its time.

This power will show itself by the new incorporating into itself the spirit and vitality of preceding revelations, and at the same time transcending the old in the power of meeting new mental, moral and spiritual requirements.

But what does this imply on the part of the reader and interpreter of Scripture? What did it imply on the part of Paul as a reader of the Old Testament? Certainly not the belief that every Special Revelation in command or institution would be perpetually binding on men. Certainly not that every detail of doctrine, form and ceremony was of equal value. If so he could never say: "we are no longer under law but under grace," and deliver a message which was in many ways destined to supersede laws and institutions of the old dispensation, though they had been established with the authority of "Thus saith the Lord." On the contrary it was his sense of historic development, and his freedom from merely external authority—i.c. from authority which did not work through his judgment—which was the secret of his liberation from Judaism, and which made him sensitive to the Holy Spirit's new message to his time.

And this must be the attitude of every student who would have a comprehensive knowledge of Holy Scripture. Brought face to face with Divine mystery, like Paul he would pray: "Lord what wilt thou have me to do," and at the same time use all his God-given faculties and attainments in reading God's messages to men in the past. He will thus read, not solely in the flickering light of feeling, not merely with reverent awe of Sacred Writing, but in the rich many-rayed steady light thrown upon the sacred page by literature, art, science, and philosophy. In a word his progress in the knowledge of Divine Truth will be in proportion as he is both consecrated and cultured.

Thus we come to our fourth and last principle: Special Revelation, having been accommodated to the changing needs and circumstances of the race, must be read in the light of the different phases of human development.

But this is practically all that is claimed by the more moderate advocates of Higher Criticism. So that we certainly cannot say

that Historical Criticism does violence to Special Revelation. If the conditions which we have pointed to are conditions that must be fulfilled before a Special Revelation can be received or understood, Historical Criticism does the very opposite of violence to Special Revelation. It rather gives it the strongest claim to belief and obedience, by showing its vital connection with the past development and present requirements of men. It enables us to penetrate the hard rind of tradition and mechanical interpretation, and feed upon God's "Living Bread." It raises us above the confusion of changing and conflicting details, incident to a localized study of Scripture, and gives us a glorious view of the same Eternal Spirit constantly drawing His people into closer union with Himself, through divers means suited to their constantly varying needs and circumstances. It dispels many obscuring and distorting mists of age, and reveals in clearer light the kinship of our ancestors' spiritual struggles with those taking place to-day in our own lives.

The right or rather the necessity of applying "human canons of investigation," as we have attempted to show, has a basis in the conditions of knowledge. When we have grasped the fact that such conditions exist, and that even Special Revelation must come under them in order to have effect as a message to men, we have, I think, made one step towards calming the conflict between two equally earnest parties in our Church, and two equally worthy feelings in every earnest Christian soul: the feeling of reverence for the truth that has in a special way uplifted human souls, and the feeling that we must bring that truth into harmonious relation with the other matters and methods of certitude in our distinctively scientific activities.

J. A. SINCLAIR.

# ON THE SO-CALLED "RAILWAY SPINE" OF ERICHSEN.

THE great increase in railway travel during the past fifty years has brought into notice a class of injuries that previously attracted but little attention; injuries resulting from the accidents that it seems impossible to avoid as long as human beings are constituted as they are, with but limited powers of endurance, memory, and observation. These injuries may be classified as of two kinds, i. where some visible mischief is done, such as the fracture of bones, or the laceration of tissues resulting in the loss of limbs or the limitation of their usefulness or the destruction of life itself. ii. Where no apparent harm has been sustained at the time of the accident, or at most some trivial injury, and the person, after perhaps assisting in rescuing others, goes on his way and shortly after, it may be in a few hours, or not for several days, develops various nervous symptoms, the nature of which is obscure and their prognosis difficult. latter class of injuries it is that forms the great bulk of claims for compensation, and from the difficulty of properly estimating exactly how far the sufferer is incapacitated from following his occupation or how long he will be unable to do so, great and unseemly conflict of medical opinion arises. If a man has a leg or arm broken or lost the medical attendant can approximately judge how long he will be laid up, and the patient can estimate what will be the pecuniary loss to himself from being unable to attend to his business during that period. Such injuries admit of but little difference of opinion on the part of the medical attendant of the injured person and the medical advisers of the railway company. The nature of the injury is perceptible to the observer, whose opinion is formed from the evidence of his own senses and not from the statements of the injured person, which can neither be contradicted nor confirmed by the observations of another. Yet a very large amount of the injury sustained in a railway collision, and that forms the basis of a claim for compensation from the Company afterwards, is of this kind, intangible, invisible, only

known to exist from the patient's own statements, sincerely believed in by his own sympathetic friends and attendants, sceptically regarded by those whose sympathies and interests are not enlisted, or rather, are opposed to the admission of their exist-These subjective symptoms, as they are called, consist of pains and aches in various parts of the body, peculiar sensations, such as numbness, tingling, hyperæsthesia or anæsthesia, paralysis, loss of memory, inability to attend to business, to concentrate the attention, sleeplessness, defects of vision or hearing, loss of virility, loss of self control, shown by undue readiness to give way to tears or laughter, depression of spirits, and various other symptoms indicative of nervous disturbance, but all presenting the same difficulty to the medical man that for his knowledge of their existence he is dependent upon the statements of the patient and his friends and not upon his own powers of observation. These symptoms often do not make their appearance at the time of the supposed injury, but are gradually developed afterwards and continue for an indefinite period of time, often for months or years, and resisting all treatment, recovery, when it does take place, being frequently rapid and complete and coinciding in a remarkable manner with the settlement of the claim made upon the railway company for compensation. It is this indefiniteness, this absence of evidence of organic injury that forms the difficulty in the way of diagnosis, that leads to such marked difference of opinion on the part of medical men, so often manifested to the discredit of the medical profession in the witness box.

The first work that attracted general attention to these obscure nervous results following railway collisions, consisted of six lectures on the subject, published by Mr. Erichsen in 1866. They were by him attributed to the concussion and shaking received by the spinal cord and its membranes as a result of the violent shock consequent on the sudden arrest of motion that occurs during a collision, and a subsequent low grade of inflammation in one or other or both of these structures. His views, elaborated in a later work in 1875 were generally accepted, and Railway Spine and Concussion of the Spine, became recognized ailments, though, as he pointed out, the condition is not peculiar to railway accidents but may occur from similar causes, however induced, such as a fall from a carriage during a runaway, severe blows

directly applied to the spine, injuries of distant parts of the body unattended by direct blows on the back, but affecting the spine through the general shock to the system, and sprains, wrenches or twists of the spine. Mr. Erichsen's opinions, elaborated with great ability and illustrated with numerous cases, became the standard authority upon injuries of this kind, and were generally accepted without question by medical men and by judges, lawyers and juries as the correct pathological explanation of the obscure conditions to which I am referring.\* They gave a great stimulus to actions to recover damages which resulted in enormous expense to the companies involved. Many of these actions were no doubt honestly brought, but it is equally certain that many were fraudulent, since the ease with which nervous symptoms were feigned, and the difficulty and often impossibility of detecting the imposition opened the door to numerous dishonest attempts to extort money. Cases of this kind, in which large and successful claims for supposed permanent spinal injury were prosecuted, and in which immediately or shortly after a settlement had been arrived at, complete recovery ensued, became so frequent that the attention not only of the railway companies, but of surgeons in England, the Continent and America was directed to the matter, and the results of their investigations published in journals in the different countries have thrown a great deal of light upon the subject, and shown that real or organic injury to the spinal cord or its membranes is far less frequent than would be supposed from Erichsen's book. tunately, these writings are scattered through different journals and inaccessible to most medical men, while Erichsen's lectures being published in book form and well known, influenced public opinion much more than other less known and consequently less read writings, though the ability of these authors entitled them to equal weight. In 1883, however, Mr. H. W. Page, the surgeon to the London & North Western Railway, published a work entitled "Injuries of the Spine and Spinal Cord and Nervous Shock" in which he embodied the results of his own

<sup>\*</sup>Riegler gives statistics which show that since the passing of a law in Germany for the compensation of persons injured on railways, the number of injuries or complaints of injuries had enormously increased, and that moreover of thirty-six complaints after injury, no fewer than twenty-eight were of the back, while Page states that among his own cases more than 60 per cent, of the injured persons made some complaint at some time or other of having been hurt in the back.—Page. "Railroad Injuries," p. 26.

experience as surgeon to one of the largest and most important railways in England. He points out the lack of clinical and pathological facts to support Erichsen's theory, attributes the local symptoms, the pain in the back, and stiffness of the muscles to the direct effects of sprain of the ligaments and muscles of the spine rather than to injury of the cord itself, and the nervous symptoms to the mental emotion experienced by the sufferer, who is suddenly placed in an appalling situation in which he feels his utter helplessness to avert injury or to protect himself, and the general nervous shock thus occasioned, a condition which is often prolonged and maintained by the mental strain, incidental to the legal proceedings commonly taken to obtain compensation. In support of his position, he directs attention to the manner in which the spinal cord is suspended in fluid within its membranes and surrounded by a bony structure, flexible yet strengthened by numerous strong ligaments and so surrounded by powerful muscles that it would seem almost impossible that the cord should receive any injury without these structures being first the subject of it and to the probability that they will exhibit some indications of the injury such as pain and stiffness. fortunately in Mr. Page's first works, the tone was too much that of a special pleader, who was desirous to make out the best case possible for the railways, and to undo as far as he could, the mischief that he conceived had been done by the ready adoption of In a later work he is somewhat more temper-Erichsen's views. ate while maintaining the same opinion. Nevertheless, the prevailing opinion, I think, among railway surgeons is that Page is correct, and that so-called "Spinal Concussion or Railway Spine" does not exist as a distinct disease, that the various anomalous symptoms before referred to, where not simulated are due to general nervous disturbance brought about by mental conditions, such as a shock, emotion, anxiety as to the result of lawsuits, etc.

Where no outward sign of injury to the spine is present at the time of the accident, and no immediate evidence of lesions of the cord or its membranes, such as paralysis or modification of sensation or motion, neither our present clinical or pathological knowledge, based on the experience hitherto acquired, warrant us in attributing to gradually developed disease of the spinal cord (subacute myelitis) the anomalous nervous symptoms that to gether constitute "Erichsen's Railway Spine," or (which is more important) in giving a prognosis of permanent disability and an early fatal ending. Yet such diagnoses and prognoses are not unfrequently made and that, too, in the courts under oath, the subsequent course of the case after a satisfactory compensation has been awarded by the jury, showing how grievously mistaken the medical evidence has been. One such case came under my own notice a few years ago, in which a noted New York expert gave a written opinion that the patient would probably live but a short time, and possibly lose his reason; yet in little over a year after, the patient had so far recovered as to be able to resume his employment, and is now (about four years after the opinion was given) in good health, and fully recovered from all symptoms of disease.

Admitting the difficulty of forming a correct judgment in these cases, of deciding whether any real and progressive lesion of the nervous system exists, and of deciding whether the case before us is one of real and permanent injury, or one that is likely to recover after the anxiety of a protracted law suit is over and a favorable verdict has been rendered, are there any means by which we can form a probable opinion, and what are they? I think our means of diagnosis may be summed up as follows:

- I. The absence of any apparent injury to the spine adequate to cause disorganization or derangement of the cord, for it must I think, be admitted that the cord is so well protected that it is to say the least, most improbable that it can be injured without any visible injury to the spine.
- II. The time of development of the disability. A man who at the time of the accident feels no ill effects and is able to move about and assist others is not likely to be suffering from organic lesion of the cord, and of special symptoms subsequently making their appearance, local pain and stiffness will probably be due to sprain or contusion; headache, loss of control of the emotions, loss of memory, and sleeplessness to the general shock to the nervous system. On the other hand a man who is stunned and helpless at the time, or who becomes unconscious or paralyzed within a few hours is probably suffering from hemorrhage on the cord or some direct lesion of its substance.

- III. The nature of the symptoms; mere complaints of headache, sleeplessness, loss of memory, vertigo, stiffness and want of power of limbs, loss of sexual power, unless accompanied by visible changes, such as wasting of the muscles and loss of electrical reaction are not necessarily indicative of actual disease but may be assumed for purposes, not exactly of deception (for I am not here referring to malingering) but of increasing or exciting interest or sympathy, or they may be the natural outcome of the nervous shock received at the time of the injury, aggravated and maintained by mental influences of worry and anxiety consequent on protracted legal proceedings.
- IV. The history of the patient both personal and family. When this shows a tendency to neurotic troubles, hysteria, neuralgias, etc., we should be doubly careful before we assert positively the existence of organic disease from subjective symptoms alone. In this respect the business circumstances of the patient, if known, would often furnish a valuable aid to diagnosis. A man, on the verge of insolvency or in business troubles that can only be warded off by his personal attention is very likely to have nervous symptoms increased by the fact.
- V. Lastly there are certain diagnostic symptoms which can be discovered by careful examination of the various organs of the body, such as changes in the fundus of the eye indicative of degenerative change in the nerve structure; the so called reaction of degeneration, elicited by electrical tests, indicative of loss of responsive power in the muscles and degeneration of their substance; lessened or exaggerated tendon reflexes, etc. All these being evident to the senses of the observer are valuable aids in diagnosing real from simulated disease, but, as a rule, they require to be investigated by an expert, the average medical man having too little opportunity of practising these methods to be able to state their results with authority.

I have only one thing more to add and that is on the subject of prognosis. Too much care cannot be exercised in predicting the probable duration or result of a case of the kind here referred to. Railway medico-legal reports teem with cases in which surgeons have predicted permanent disability, early death, insanity, etc., with the natural result of large compensatory verdicts from

sympathetic juries, which predictions have been falsified within a year or two by the patient returning to health and occupation. A medical man is only justified in giving such an opinion where the signs of organic injury are marked and unequivocal. In most cases, where only symptoms of nervous disturbance are present, no matter how severe they are and how helpless the patient may apparently be, the surgeon will be justified in anticipating return to health more less complete, in course of time.

H. J. SAUNDERS.

When Pericles is too grave and silent, I usually take up my harp and sing to it; for music is often acceptable to the ear when it would avoid or repose from discourse. He tells me that it not only excites the imagination, but invigorates eloquence and refreshes memory; that playing on my harp to him is like besprinkling a tessellated pavement with odoriferous water, which brings out the images, cools the apartment, and gratifies the senses by its fragrance.

"That instrument," said he, "is the rod of Hermes, it calls upon the spirits from below, or conducts them back again to Elysium."

Come sprinkle me soft music o'er the breast,
Bring me the varied colors into light
That now obscurely on its tablet rest,
Show me its flowers and figures fresh and bright.

Waked at thy voice and touch, again the chords
Restore what restless years had moved away,
Restore the glowing cheeks, the tender words,
Youth's short-lived spring and Pleasure's summer-day.

# THE LEGEND OF ULYSSES IN DANTE AND TENNYSON.

#### No. I.

The birds' quiet singing, that tells us
What life is, so clear.

The secret they sang to Ulysses
When, ages ago.
He heard and he knew this life's secret,
I hear and I know.—Browning.

Ulysses if not the greatest is the most interesting of the Greeks who went to Troy. He is also the best known. The legend of his life has come down to us in one of the world's noblest poems, the great sea-song of the Odyssey, the mellow essence of old Hellenic civilisation, written in the youth of the world but probably in the age of the poet, for it possesses in a more than ordinary degree the incomparable serenity of Greek wisdom and art.

There is a certain complexity in the character of Ulysses, a rich mingling of elements, which brings him more within the reach of our sympathies than the superb figures of Achilles or Ajax Telamonius, or Agamemnon, King of Men, with their colossal simplicity of action and motive. Ulysses in comparison is almost a modern. It is not only that he combines the heroism of the warrior with the sagacity of the counsellor. Even to Homer he is more than this. He is besides—the grand characterising stroke is given in the opening lines of the Odyssey—the man of profound and soul-subduing experiences, who has seen many cities and observed the different ways of men. He is the type of an intellectual curiosity in comparison with which that other ocean wanderer. the Æneas of Virgil, notwithstanding his "piety" is an almost colourless and insignificant conception. In Sophocles there is a further evolution of the conception of Ulysses. The great dramatist seems to find something in his character suitable for the expression of a critical and philosophical spirit, of a mind which has to some extent risen above the prejudices and the limited religious feeling of the ordinary Greek. In the Philoctetes he is perhaps something of the sophist, but he has something too of the

wisdom of the philosopher, of the sage follower of Athene Polias, guardian of states and civil order. Those words of his in answer to the imprecations of Philoctetes and the superstitious fears of the chorus are the calm utterance of a mind which has considered the conflicting claims of the state and of private morality, and is basing its resolution on a broader conception of moral law than they can understand:

"There is much I could say in regard to these charges of his, if this occasion were a fit one. But here a single word must serve me. Where the circumstances require such action as ye have seen, then I am such as ye now see me (i.e. a servant of the state using, as I have had to do all along, my intellect to overreach proud unmanageable heroes who would otherwise bring ruin on us all), but wherever the case to be determined regards righteous and honourable men, there could be found none more regardful of the divine laws than I."—(Philoctetes, 1047-50.)

And in the Ajax, Ulysses represents a still more positive advance beyond the ordinary limits of moral sentiment in the Greek. It is true that with all this there is a darker thread in his character, a preference for stratagem and finesse which is not far from love of them, and although this side is not strongly accented in the Iliad or the Odyssey, where perhaps the worst epithets attached to his name are those addressed to him half fondly, half-reproachfully by Pallas in the 12th Book, yet it is the side which is most conspicuous in his traditional achievements in connection with the Trojan war. And it is the side emphasised by the later poets, to whom he is little more than the personification of wile and stratagem.

The Latin poets, Virgil and Ovid in particular, darken and obscure the higher Homeric legend of the divine Ulysses, δτος 'Θδυσσεύς. Virgil coins for him the harsh epithets, scelerum inventor, hortator scelerum, inventor of crimes, adviser of crimes; and Ovid besides borrowing the latter phrase presents him in the 13th book of the metamorphosis, as something resembling the Greek of the poet's own time, fluent in speech and artful, but not much better than a coward in action.

qui clam, qui semper inermis Rem gerit, et furtis incantum decipit hostem. It is true it is an enemy that speaks, Ajax, but that even an enemy should speak so shows how decidedly the true Homeric legend of Odysseus, the great, the wise, the much daring and much enduring, had been overlaid with an inferior conception.

It is hard to say in what different forms the story of Ulysses reached Dante. He knew the Latin poets well, but Homer and the Greeks only as great traditions. Like most classical stories, the legend seems to have received considerable accretions of an incongruous or grotesque character from the wonder-loving mediæval mind, some of which, such as the story of the foundation of Lisbon by Ulysses, may have suggested to Dante the idea of a second voyage. That he took it from the prophecy of Teiresias in the Odyssey seems less probable. But however that may be, it is wonderful how the true features of the Homeric hero, the genuine ideal of the sea-farer Ulysses, appear again in Dante's picture of him. For one thing, the whole classical world, whether in myth, history, or legend, was equally and almost terribly real to Dante. Along with the contemporary history of Italy, that bitter little world of civic and political strife, it constituted nearly the sum total of human life with which he was intimately acquainted, with which his reason could deal freely and judicially. The two form the universe of facts on which he trains and exercises his judgment of life. The one, the world of Italy, he knows intimately by personal knowledge and sure tradition; the other, the classical world, distant as it is, is as distinct as contemporary fact for his imagination and is even more treasured as a part of human life which has been made permanent, lucid, and of ideal significance in the forms of art and literature. All outside is a world comparatively unillumined or altogether obscure to him. So that he grasps that classical world and its figures, whether a legendary Capaneus or an actual Cato, with such fervour of imagination and insight, with such profound gratitude for its light and guidance, that every fact in it is instinct with life and meaning for him. And accordingly in that great series of dramatic monologues, the "Men and Women" of the Inferno and Purgatorio, the first type that his imagination calls up of any species of malefactor is always, if possible, a personage from the classical world. In this way he steadies his judgment amongst the distracting influences of personal and political sympathies or antipathies, and makes a moral

synthesis of the ancient and modern world which in some degree liberates and broadens his view of life.

Dante guided by Virgil has advanced into the Inferno as far as the eighth circle, which is divided into ten great pits each appropriated to a distinct class of those who have misused their intellect for malicious and fraudulent ends. As he comes to the eighth pit and standing on the sloping edge surveys its gloomy depths, he perceives innumerable moving shrouds of flame thick as the fire-flies that the Italian peasant sees of a summer-night in the valley where he is accustomed to labour; and each shroud of flame, as he guesses even before Virgil tells him, conceals a sinner, one who has abused his intellect in guileful deceits and stratagems. The sight of it is painful in his memory still. At the thought of it, he tells us, he puts "a rein on his intellect more than he is wont, in order that it should not run where virtue does not guide it, in order that if Providence has bestowed on him the blessing of intellect he may not turn it into a curse to himself."

Amongst these pillars of flame which sweep rapidly and silently past below him, he sees one advancing the flame of which is divided at the top so that it has a double peak,—like the twin flames on the funeral pyre of Eteocles and his brother, he thinks, remembering a passage in Statius which had evidently strongly affected his imagination to be recalled at such a moment. "Who is in that fire," he asks Virgil? And Virgil tells him, "inside of that Ulysses and Diomedes suffer, and thus together they run united in punishment as they were united in crime. Within that flame there is lamentation for the stratagem of the horse (by which Troy was taken) and the arts by which Deidamia lost Achilles and Troy its Palladium."

Such, as far as Dante has comprehended the teaching and theology of the doctors of the Church, is the inevitable place of Ulysses amongst the damned. Of the guilt there is no doubt. Does it not stand written and re-written in emphatic words in what for Dante is the highest authority, the Æneid of Virgil, scelerunque inventor, Ulixes? As for the punishment it is thus, as Dante has seen,—not degrading but exceedingly painful, the punishment of one wrapped in the hell-fire of his own eager scheming mind; and it could not be otherwise. For Dante however much he admires, or even loves and respects some of the personages he

meets in the Inferno never falters in his stern theological judgment of their sin and the place it condemns them to there. Even his old master, Brunetto Latini, himself a poet and philosopher, whom Dante addresses tenderly—O dear and amiable image of him who while in the world taught me how man is made eternal, come l'uom s'eterna—is there in the burning sand of the seventh circle, his face blasted with flame.

That is the theological aspect of Dante's judgments, stern, inflexible, minatory as a Hebrew prophet's for a thoughtless humanity which does not seriously realize the nature and pains of crime. Brunetto, the dear old soul,—he was born almost half a century before Dante, and must have been a very venerable image in the poet's mind,-had thought he was only "un poco mondanetto," perhaps a little.....! The apology might have passed readily with our nineteenth century Goethe, according to whom "the sins of poets are not deep" (Dichter sündigen nicht viel) but it is of no avail with Dante though he must have known it . He looks sadly at his old master and says with grave surprise, Are you here, Ser Brunetto? The question and the surprise it implies, may be a kind of dramatic machinery, but there is little which is merely of that character in Dante and is not also attached to some underlying reality. It seems as if when the vision of this particular sin was strong upon him, Dante had realized in a flash, as it were, the truth of reports never perhaps before quite clear to him regarding that 'dear paternal image.'

Thick indeed is the veil which hides the reality of Dante's ideas from us, strange and alien to our ways of thought are the forms in which he expresses judgments which yet have a reality and meaning as deep as anything that could be said in this century of ours. That Dante should sit in deliberate judgment on the character of a fabulous Ulysses, a character appreciated by him only at second hand through the distorted versions of it given in the Latin poets, may seem in the last degree unedifying. But to Dante it is a problem of the profoundest interest, for Ulysses is the great prototype of these, and they are many, many as the fire-flies of a summer night in a Tuscan valley, who abuse the gift of intellect for purposes of wile or deceit. Amongst them are men of great gifts, not ignoble in character, heroic in action, persistence and endurance. Of such Dante perceives Ulysses to

be the classical type, and it is in language of unusual excitement that he begs Virgil to stay till that moving shroud of flame with its double peak come near them. Virgil replies that Dante's desire is a worthy one, and when 'the two-horned flame' is sufficiently near, he himself addresses the pair of Greek heroes Ulysses and Diomed whom it conceals. "O ye, who are two within one flame, if I have merited anything from you whilst I lived; if I have merited much or little (assai o poco, says Virgil, conscious no doubt of that impius Tydides.....scelerunque inventor Ulixes, and other hard epithets) when I made the lofty rhyme, (alti versi, clearly distinguished by Dante from his own plainer diction and humbler rhythms) do not move away, but one of you say where it was that he perished and came to meet his fate."

Virgil as usual has divined what Dante wanted to know. At his words the higher of the two burning peaks began to sway like a flame agitated by the wind, and a murmuring voice 'as if it were a tongue that spoke' came forth and told them of the last voyage of Ulysses.

Neither the sweet bond of a son, (it said) nor pious affection for an aged father, nor the love I owed Penelope, which should have made her days joyful, could quell within me the burning desire I had to see the world and the ways of men in their vice and in their virtue. But with a little band of companions who did not desert me, I set out in a vessel alone on the great open sea. We saw both coasts as far as Morocco and Spain and the island of the Sardinians, and the others that the sea washes round. And I as well as my companions were old and worn, when we came to that narrow strait where Hercules set up his pillars for a mark that men might be warned not to go beyond that. On the right hand I left Seville (note the haughty ellipsis I, Ulysses, disregarding the warning, continued my voyage); on the left, Cewta was already out of sight. O brothers, I said, who through a hundred thousand perils have reached the western bounds of the world, do not refuse to the little spell of waking life yet left us the experience of a world unknown to men. Consider the seed of which ye are (humanity i.e. highest of created things) ye were not made to live like the beasts (without ideals or aspirations), but to follow virtue and knowledge. With this little oration ("orazion," Dante does here, as once in a while, use the grand word instead of the plain one, because, little as it is, the speech is in 'high style' as Chaucer would say.) With this little oration I made my companions so eager to go forward that after it I could hardly have restrained them. And so, having turned the stern of the boat east, (Ulysses finds it impossible to describe where the bow was turned to) we made wings of our oars for this wild flight ("al folle volo," mad flight, conscious of venturing farther perhaps than is permitted to men) bearing always a little to the left in our course.

Ulysses then goes on to tell how they voyaged till they saw the southern stars, and had been five months on the great deep when a mountain appeared looming gray in the distance and of such height that he had never seen anything like it. They were in high spirits when suddenly joy was turned into wailing; for off that new land came a storm blast and struck the bow of the boat. "Three times it swung her round in a maelstorm, the fourth time her poop rose in the air and her bow went under—thus it was ordained—so that the sea closed over us."

Here then we have something like a reconstruction of the Ulysses of the Odyssey, the man of heroic endurance and noble aspirations, 'not born to live like a brute', but with an intellectual curiosity, a divine thirst for knowledge and experience which the Sirens knew how to tickle cunningly in their song.\* This is the other half of Dante's judgment of the life and character of Ulysses, the free moral judgment which he puts in curious yet not altogether irreconcileable contrast to the theological judgment, reaching in this way beyond the limited theological ideas of his age yet keeping in conformity with them, It is this comprehensiveness which makes the Divina Commedia in spite of the narrowness and rigid limitations of its author's theology, liberal, compassionate, human.

To Dante Ulysses is a solemn reality, a heroic life, yet doomed to never-ending pains for that misuse of the divine gift of intellect.

\* Αλλ΄ όγε τερφάμενος νέιται και πλειόνα είδώς.—Od. Bk. XII.

Ulysses! stay thy ship, and that song hear That none past ever but it bent his ear, But left him ravished, and instructed more By us, than any ever heard before. For we know all things whatsoever were In wide Troy laboured; whatsoever there The Grecians and the Trojans both sustain'd By those high issues that the Gods ordain'd. And whatsoever all the earth can show Tinform a knowledge of desert, we know.

Chapman's Transl.

Perhaps even that voyage, that 'mad flight' beyond the straits of Hercules is an act of temerity towards the gods, another product of that restless scheming mind not content with the limits which the deity has set for the world of men, and which the semi-divine Hercules has taken the trouble to mark for them, so that the storm blast must arise and the sea engulf him. That is what Dante sees Ulysses to be, an audacious man too disregardful of divine traditions, too unscrupulous in his ambition; unfit therefore notwithstanding his greatness for that honourable first circle of the Inferno where Homer is, 'l'altissimo poeta,' and where Aristotle, 'the master of those who know,' sits 'in the midst of the philosophic family.' No love nor respect can rescue him from Malebolge, not even the charity of a St. Francis, for the black imp that drags men there is Rhadamanthine in his logic and, as that other sinner Guido da Montefeltro knows, bases himself irrefragably on the principle of non-contradiction.

And yet on the other hand Dante sees that Ulysses has also many virtues, that he is heroic in achievment and aspiration and resolved not to live like a brute, but to follow noble things and attain knowledge. We may understand that it is difficult for Dante, a man of the 13th century with a rigid theological system and a firm belief in the existence of hell and purgatory, to reconcile elements so conflicting and to give us any human and credible picture of a Ulysses at all. The theologian and the poet are at war in him here in a sort of opposition that he cannot altogether reconcile. The theological judgment remains to some extent distinct from the moral one, and different. But his merit as a poet and interpreter of life is that he feels and sees all sides, as comprehensively as we even now might feel and see them, and sets it all down reconciled or unreconciled.

This legend of Ulysses then as Dante has handled it contains a profound conception of life. It is the portait of a character powerful and heroic, but in which the good and evil elements are much mixed, and it is drawn on the whole with a freedom of judgment and a breadth of human sympathy which reach beyond

<sup>\*</sup>Inferno, Canto 27, a good specimen of grim Dantesque humour.

the theological limitations and even the moral sense of that age. It impresses us with a curious sense of resemblance, at least of affinity to some of Robert Browning's studies in *Men and Women*, that of Andrea del Sarto, for example, Its artistic form, the dramatic monologue, is practically the same, it is similar in depth and comprehensiveness, and in spirit the difference arises rather from different theological conceptions than from a difference of the moral sense. Even the proportion of real and imaginative elements in their work must for both poets have been much the same.

Where Dante got the hint for his last voyage of Ulysses, whether from Homer or Solinus, is a question of little or no importance. It is sufficient in this respect that he is true to nature and has sympathetically divined the ineradicable instinct of the wandering Ulysses. But since he was not acquainted with Homer, the question where he got his high ideal of Ulysses as the man of profound experiences and of noble aspirations, the follower 'of virtue and knowledge' is of some significance; for to reach it amidst the inferior legendary matter, the base accretions of Ovid, the uncomprehending indifference of Statius with his cuckoo-like reiteration—tarde reducis Ulixi, and the curious frigidity, to say the least, of Virgil for the great Homeric hero of the Odyssey, even Dante, strong and loving as his grasp of that ancient world was, needed some direct help.

And there can hardly be any doubt that he got it from Horace. not Horace the Anacreontic poet of love and wine, who follows the rest of them with a new branding epithet of his own, duplicis Ulixei, but that wise counsellor of youth, the Horace of the satires and epistles, under which title, 'Orazio satiro,' Dante gives him an honourable place amongst the virtuous ancients in the first circle. In the first of his epistles to Lollius, Horace explains the excellence and profound morality of the two great Homeric poems to the patrician youth who is just then giving, by way of elocutionary exercise, public recitations from them in Rome. Horace's lines are a good specimen of moral interpretative criticism and probably go a thought deeper than the exegesis of contemporary tutors, else he had hardly thought of sending them to Lollius. His characterisation of the Iliad is eminently Horatian, witty, sensible, but showing no great sympathy with all that heroic bustle of war and intrigue. "For all the delirium of the kings it is the people of the

Greeks that must suffer. Faction, stratagem, crime, lust and rage, outside and inside of Ilium there is sinning alike." But he recognizes with an accent of preference the serene wisdom and less troubled atmosphere of the Odyssey. In particular he revives with almost surprising clearness and depth that ideal of the divine Ulysses which inspires it, and which its heroic rhythm carries safely over the ocean of time, like the hero himself, adversis rerum immersabilis undis—not to be submerged in any billows of adverse fortune. The very first line is a scornful and emphatic flout to the baser legend which Roman invidia or mere want of insight may be giving too much countenance to—

Rursus quid virtus et quid sapientia possit, Utile proposuit nobis exemplar Ulyssem.\*

Then follows some lines which characterize finely and completely what is worthy and heroic in the life of Ulysses,

the conqueror of Troy, the prudent and observant man who had examined the cities and customs of many men, and while strenuously working a way across the wide ocean for himself and comrades, went through many a hardship, a man whom the billows of unpropitious fate could not overwhelm. You know, Lollius, of the Sirens' song and the fatal cup of Circe, of which had he been so foolish and greedy to drink as his companions were, he would have become the degraded and soulless slave of an impure woman, would have lived like an unclean dog, or a hog that wallows in the mud. Compared with him, we, in our day, are but cyphers and born to do nought but consume the fruits of the earth—fruges consumere nati.

A beautiful allegory! Lollius, from which you will learn more than from the ethics of Chrysippus and Crantor—so Horace says. I have no doubt that it is from these lines chiefly that Dante took the higher side of his conception of Ulysses. Every feature of Dante's Ulysses is to be found there, except the fraud, for Horace is thinking only of the Odyssey, while Dante, to whom the Ulysses of Homer, of Virgil, and of Ovid is no fable but a distinct reality, has to reconcile the different aspects as he best can. And his chief help is this passage of Horace. Every note of it has sunk deep into Dante's mind and is reproduced in his description of that last voyage sometimes with the candour of a great poet borrowing, sometimes with his power of transforming and re-issuing. It is curious that the latest commentator on Dante, Scartazzini,

<sup>\*</sup>On the other hand he has set before us Ulysses as an instructive example of what valour and what wisdom can achieve,

should have missed such a probable reference. Horace's "multorum providus urbes", &c., gives Dante the key-note, "the burning desire which I had to get experience of the world and of the vices and virtues of men." Horace's "virtus et sapientia" is rendered in the same words in Dante's "virtule e conoscenza"; and the general force of the Horatian lines,

Quae si . . . . . . . . bibisset Vixisset canis immundus, vel amica luto sus, Nos numerus sumus, et fruges consumere nati.

is fairly interpreted in that 'little oration' of Ulysses to his companions, "Consider the seed of which ye are; ye were not made to live like brutes, but to follow virtue and wisdom."

It is curious to see how much nearer Horace is in his spirit and point of view to the 19th century than Dante. To the Latin poet the story of Ulysses is only a noble allegory, a legend from which he can with perfect freedom sweep away all baser overgrowths; but to Dante the life of Ulysses, alike on its brighter and its darker side, is too real for him to tamper with. The facts are there, undeniable, and he cannot, much as he admires the man, altogether follow the easy and benignant judgment of Horace. He even goes out of his way a little—giving thereby much trouble to commentators—to note that Circe with her glamour took a whole year and more from the hero,

Circe che sottrasse Me più d'un anno là presso a Gaeta.

Between Virgil's character of him and Horace's in short, Ulysses is a difficult problem for Dante, a man not to be either wholly banned or wholly blest, certainly not quite an exemplar for Lollius and patrician youth, nor yet merely a warning. That picture of him on his last voyage, steering with heroic audacity to his fate over the western ocean, has to speak for itself, and give some relief to feelings which remain to a considerable extent, unuttered and for Dante even unutterable—ພໍ πολημήγαν, 'ປີດົກຫາເກັ! For Dante had an intense admiration for that strength of soul which does not turn aside either for ease or for danger, and disdains compromise as an incurable wound to its own vitality. The two men for whom he betrays a respect bordering on awe are both in the Inferno undergoing much the same painful though not degrading punishment,-Ulysses and the Ghibelline chief Farinata, who looked as if he held all hell in scorn. JAMES CAPPON.

### THE RELIGIOUS CONDITION OF CANADA.

(A PAPER READ TO THE EVANGELICAL ALLIANCE, CHICAGO.)

have been asked to give an estimate of the character and movement of the religious thought and life of Canada, and in making the estimate to limit myself to the Protestant churches. The limit simplifies the problem. Of our five millions of people, fully two millions are Roman Catholics, and the great majority of these-French by race and language-would require separate treatment in any discussion. They were as completely cut off from France by the conquest of 1763 and by the French Revolution as they were from all currents of American life by distinctive institutions, laws and language which British legislation secured to them. They have in consequence remained—for good and evil alike-to a great degree unaffected by the modern spirit. Of the Protestants of Canada, more than nine tenths are Methodists, Presbyterians, Anglicans or Baptists, this being the order in the census; and as their historical evolution has been determined by a common environment and common causes, their general religious condition and movement can be traced without much difficulty.

Three events, subsequent to 1763, exercised a controlling influence on the Canadian people; the forced migration from the States into the different provinces of a hundred thousand Tories or U. E. Loyalists, at the close of the Revolutionary War; the voluntary migration from Great Britain and Ireland, chiefly in the second quarter of this century; and the political unification of Canada into a Dominion in 1867, followed by the opening up of the Northwest and the extension of the country to the Pacific.

The first event shaped our character in infancy. We sometimes speak of the United States as a new country, but it is of venerable antiquity compared with Protestant Canada. When the Republic began its national career, nigh 120 years ago, it had behind it then more than a century and a half of colonial life, the vigour and breadth of which may be estimated by its achievements and the character of the men it reared to begin and carry to a successful close the struggle with the mother-country. It counted three millions of people descended from the best stock in the world. It included a resolute maritime population, and had engaged in external wars. It had established schools, churches and universities, and its missionary and literary activities proved that it was not living for or by bread alone. But there were no English-speaking Canadians at that time, with the exception of a handful

in Quebec, Montreal and Halifax, and a few New Englanders settled on the farms of the dispossessed Acadians. Canada was an unbroken forest. It would have remained so until a slowly advancing line of population had gradually filtered in from the south, had it not been for the expulsion of the Loyalists at the close of the Revolutionary War. These men were a stiff-necked generation, who, rather than kiss the rod that smote them, sought shelter in the northern woods. They uprooted themselves, only to be planted in a soil unsuited to their habits and previous circumstances. They were isolated from their own past by civil war, and from Eoropean life by the ocean, and still more—in the case of the great majority—by their inland position. The memories of defeat and harsh treatment embittered the hard struggle for a livelihood. It is difficult to conceive of an environment less conducive to the promotion of a high level of thought and religious life; and the unprovoked invasion of 1812-15 made it less favorable still, except in so far as their gallant and successful resistance stimulated the nobler side of their natures, and inspired the hope of a future, under laws and institutions on the British model and adapted by themselves to their own needs.

The second event determined early Canadian character along the same lines as the first. Almost the entire immigration was from the mother-country. It consisted of classes who deliberately chose Canada as their home because it was British. Some of these were generously aided by the Imperial Government, and all spoke of their fatherland as home, and taught their children to regard it with affection. In their isolated condition, generally in remote backwoods, obliged to give all their thought and energy to provide for the simplest material necessities, they rested in old religious forms and traditions which their imagination glorified. These became accordingly channels from which their spiritual natures drank eagerly. In these they found "the true dignity and Sabbath of their life." They prized them for their own sakes and for the memories of the past, and they prized them all the more when their own tenacity was favorably contrasted with laxity and its evil results elsewhere. They had no conception that there was movement in the old land, and "innovation" seemed to them criminal. But neither traditionalism, however sincere, nor the consciousness of supposed religious superiority is favorable to religious or general progress. Unless absorbed in and purified by larger currents, they are apt to beget nothing nobler than fervent sectarianism, and prior to 1867 there was no national life in Canada. The maritime position and foreign trade of the provinces on the Atlantic stimulated thought, produced literature, and lifted the people to a certain extent out of provincialism, but their area was limited, and the movement of their population as well as of the immigration from abroad was to the west.

Internal development and external pressure led in 1867 to the union of the provinces, and a Canadian sentiment was born which has already had results. The Northwest was acquired and thrown open to the world; the national horizon extended from ocean to ocean; a self-reliant spirit, tainted too often by crude selfishness, but free at any rate from the coarse admixture of revolutionary violence, began to animate the people. In the wider outlook old religious differences shrivelled into insignificance, and old watchwords once thought sacred lost their meaning. In 1875 the Presbyterian churches, that had always divided, with a pathetic fidelity to the old land, along lines of cleavage that have actual significance in Scotland but only a sentimental reflection of fact in Canada, united into one church wide as the Dominion. The Methodist churches soon after took the same step. So did the Baptists and Congregationalists, as far as it was possible for bodies holding the principle of congregational independency to form ecclesiastical union. And in September, 1893, the Anglicans also united into a Canadian church, and at their first meeting the upper and lower houses unanimously accepted the Lambeth Articles as the basis for a proposed wider union. It would be difficult to overrate the significance of those great and peaceful union movements, and their effects have been marked.

From this historical sketch the present condition of our religious life can be understood and the direction of its movement estimated. With roots in a past almost wholly British, it as yet has been but faintly affected by that spirit of historical inquiry, under the dominant principle of evolution, which is quietly but profoundly modifying religious conceptions in Britain. Planted on the American continent, it has no connection with the political and ecclesiastical life of the United States. It has its own soil and atmosphere, and is confronted with only the first beginnings of those grave social problems of the city and the country which Dr. Strong depicts in his recent work. "The New Era."

What then is the result and what is the outlook? The condition of things on the surface is satisfactory. Church-going habits are universal. Family worship is generally observed. Family life is pure. Divorce is obtained only from the Parliament of Canada, a committee of the Senate acting as a kind of court, and the number of applicants for the whole Dominion is seldom more than two or three annually. The Lord's day is reverently observed in every part of the land. The ministry of the gospel is held in high esteem. A decent maintenance for the ministry is provided in every denomination, and candidates are so numerous that not only is the home field abundantly supplied, but large numbers of students go to seminaries in the States and assist the Church there in overtaking its immense field. Candidates for the ministry are

not supported by ecclesiastical or eleemosynary aid. They support themselves, like candidates for other callings. All denominations are actively engaged in foreign missions; Presbyterians in the South Seas, Trinidad, Central India, Formosa, Honan, and the Northwest; Methodists in Japan, the Northwest and the Pacific Coast, and among the Chinese of British Columbia; Baptists among the Telugus of India; Anglicans in Japan and the North-The China Inland Mission and other undenominational agencies in Britain and the States attract many young men and women, unable or unwilling to take a university course, whose enthusiasm or ignorance impels them to volunteer for work in

foreign lands.

The aspect of the people socially is also satisfactory. Sobriety An overwhelming public sentiment is in is almost universal. favor of temperance, while a vigorous section of the people demands total prohibition of the liquor traffic. Uncleanness is a more common sin than drunkenness, but sins of darkness cannot be known as well as those committed in the light. Anti-Christian socialism and anarchism are unknown, and crime does not increase as rapidly as population. There is exceedingly little Farm lands have indeed depreciated in value, but there is no experience of that depletion of the country and rural towns that is leading to religious deterioration in many parts of New England and elsewhere; and in our two largest cities, Montreal and Toronto, the great mass of the population still adheres to the church. Foreign immigration is small; population increases, but not by leaps and bounds; and the churches feel that they can cope with their work without undue strain or suspicion that their resources are exhausted.

It will be asked, Has this condition of things its roots in living faith, or is it an outward and traditional conformity which has been subjected to no strain? The question would be answered differently according to the point of view of the observer, his insight, and his opportunities for careful observation. Undoubtedly when we look at the whole field of life the signs are not equally satisfactory. But, true faith demands the allegiance of the whole man. It manifests itself in every department and knows no distinction between sacred and secular. There is then another side to the picture. Though our public men generally represent the best elements in society, the tone of political life is not high, and recent revelations show that there is a wide-spread corruption in the electorate. Again, we have produced no poetry or literature of first-class rank, though there is a school of young poets that gives promise. There is, too, a school of distinctively Canadian painters and some promise in music. What we have produced of distinctively religious literary work is inferior even to

what has been done in general scholarship, poetry, science, art and thought. Now, no amount of conformity or of external activity will compensate for the absence of that free creative spirit which is at once the proof and the condition of permanent religious vitality. Every country must take its share in the common burden and give its contribution to the solution of those problems, old as the race, which appear in new forms in every age, or accept the position of a mere dependent upon others and

sink into spiritual decrepitude or petrifaction.

In describing the present religious state of Canada I have presented the two sides of the shield. In which of the two is to be found the key to its actual spiritual state? Neither in the one nor in the other solely, but in both combined and in a study of the conditions from which both have come. It seems to me that whoever considers those conditions carefully will be prepared to appreciate sympathetically all the excellence that is apparent on the surface and to believe that there must be living roots for so much that is good, and at the same time will be prepared to make full allowance for that lack which has been pointed out, and to believe that a cloud now on the horizon, small as a man's hand, will soon cover the heavens and give the land a plenteous rain. There has not been sufficient time for us to appropriate the thought and scholarship of the modern world, nor for that reflection which is needed for the production of literary work of the highest class, either in the department of pure thought or in its application to actual social, ethical, and theological questions. Our inner development has been slow, because of material and historical conditions, and also because it has not been hastened by revolution. This is not altogether a disadvantage, for the fruit that comes to maturity at the normal time is more likely to be sound and to last than that which has been forced.

It has to be admitted, then, that till very recently Canada was not in the main stream of the world's life. It is entering that stream now. The days of isolation are over. Canada cannot hold aloof even if she would, and her young men are too virile to shun the needed strain and conflict if they could. Canada has now made sufficient material and political progress to entitle her to take a place with full-grown countries, submit the reality of her faith to the tests that are applied everywhere else and prove her faith by works of the highest order. The questions that are being discussed in older and more crowded countries must be faced by the wise men and the young men of Canada, no matter what disturbance to deeply-rooted preconceptions may be the result. Movement in this direction has commenced already, as might be expected on the part of a truth-loving people coming into full consciousness of the meaning of the century in which it finds

itself. Our institutions of learning, with the exception of the small university of King's College, Nova Scotia, are of recent date, and they are now filled with men and a due proportion of women, who combine the self-control, reticence, and modesty begotten by conservative training, with love of learning and a deep religious spirit, and also with that freedom from routine and readiness to experiment that belongs to a new country. Students of such a type must have been brought up in homes where religion is a These homes are the glory of the land. Anchors cast there are sure to hold even when the earth seems to be removed and the mountains cast into the midst of the sea. Carlyle always assured his mother that his faith was essentially the same as her own, though the form was different. She knew that his word could be trusted, and he knew that her religion was the expression of living faith. It is this union of the old and the new, best found in the family, that is needed in the church. A conflict between them brings misery and loss to both, though the issue is always the same,—"the elder must serve the younger." Why should there be conflict, when peace would be so much nobler? The old generation should not attempt to fetter the new, for that is to fetter God; and the new must not despise the old, for that is to despise their fathers as well as God.

The Protestant churches have not modelled themselves on They were begotten of faith, and faith means the reconciliation of liberty and union in the atmosphere of love. But Protestantism in the church has been dominated by fear. It has been afraid of the body, afraid of the intellect and afraid of the imagination. It has been afraid of individualism and of socialism; of political life, of industry, and of amusement; of science and of art; of enthusiasm and of quietism: and the consequence is that it is called upon to face, in an utterly disorganized condition, the tremendous conflicts that are impending in almost

every country.

I hope better things for my own country. But we must remember that principles and not protest gave victory to the Reformers, and that it was faith in the Evangel and not the mere denunciation of pious frauds that made them heroes. Their principles and their faith are all that are needed now, and they are needed by all who study God's Word with modern appliances and by the modern method, or who apply the gospel to the solution of to-day's social, economic, and international questions, or who seek to meet new conditions with new instrumentalities. without regard to weak and beggarly elements that have outlived their usefulness. There is faith in the heart of young Canada. This faith has been nurtured by godly parents, and therefore it is deep and strong. From quiet firesides, I believe, there shall come

forth to us "seven shepheds and eight principal men," that is, fit leaders in abundance as they may be called for; not only good citizens but God-fearing statesmen to guide us to the highest developments of national life and international duty; not only able ministers of the Word for thousands of congregations, but great teachers and prophets whose influence shall extend beyond the boundaries of their own church and land; not only scholars who are satisfied to walk along well-beaten tracks, but thinkers who are not afraid to sail strange oceans, that they may discover new worlds and map them out for the possession of future generations.

## CRITICAL NOTES.

### THE SPENSERIAN STANZA.

THE nine-line stanza in which Spenser wrote his Faerie Queene has a unique place in the history of English verse. We can trace all our other measures, blank verse, couplet, sonnet, song or ballad, to some imperfect and inchoate stage from which they develop by the successive efforts of great poets into polished and powerful vehicles for poetic thought. But the stanza of the Faeric Queene seems to spring a new and perfect thing from its author's brain, a marvel of originality and sweetness. Its principal merits as a metrical form are the following: First, its unusual compass, nine lines of harmonized rhythms which though they may be slightly broken and changed at certain parts of the stanza, in all the best stanzas constitute a rhythmical unity larger and therefore more capable of varied cadence than even the ottava rima or the seven line-stanza of Chaucer.

Take as a fair example the two following stanzas from the 2nd Book; the song the sirens sang to Guyon:

So now to Guyon, as he passed by
Their pleasant tunes they sweetly thus applyde
'O thou fayre sonne of gentle Faery,
That art in mightie arms most magnifyde
Above all knights that ever batteill tryde,
O! turne thy rudder hitherward awhile
Here may thy storme-bett vessell safely ryde,
This is the Port of rest from troublous toyle,
The worldes sweet Inn from paine and wearisome turmoyle.'

With that the rolling sea, resounding soft, In his big base them fitly answered; And on the rocke the waves breaking aloft A solemne Meane unto them measured The whiles sweet Zephyrus lowd whisteled His treble, a strange kinde of harmony, Which Guyons senses softly tickeled, That he the boteman bad row easily, And let him heare some part of their rare melody.

In the first of these stanzas there is the slight break at the end of the second line. After that it rolls in one magnificent rhythmical movement to its close in the long Alexandrine at the end of And the rhyme system is cunningly devised to support this continuity of rhythm. That middle couplet rhyme (lines fourth and fifth), with the help of the final couplet rhyme, effectually saves the stanza from any tendency to break up into two isolated quatrains, as in the sonnet, and preserves its unity while relieving it from the monotony of alternate rhymes.

The second merit of the stanza is its melodious close in the long Alexandrine. A strong full close is necessary for a long stanza, and is of course even more imperative in the case of a nine-line stanza than it is for the ottava rima or the seven-line stanza of Chaucer. Spencer has simply strengthened the full close of the ottava rima in couplet rhyme by giving the last line two additional syllables. In any case the close in couplet rhyme is a favourite method of Spenser's. Even in the sonnet he pre-

Its third merit is a subtle power of adapting itself to continufers it. The Alexandrine at the close of the stanza has a curious double function. While on the one hand it brings to a full and beautiful close the rhythmical series of the stanza, on the other, it disposes the mind to revert, by a natural reaction, to the normal rhythm of ten syllables, to resume readily, as it were, the musical movement which for a moment it had gone beyond. The Alexandrine thus forms a much better transitional movement from stanza to stanza than might at first seem to be the case; or rather, it may be thus used. Let any one consider for example the artistic effect of the Alexandrine as a transition in the two

It is easy to see what an exquisite expression this measure is stanzas quoted above. of the genius of the poet who created it. It is in perfect harmony with the rich languorous rhythm of his verse, the dreamy magic of his phrase, the delicately ideal and romantic colour of the world of the Facrie Queene. Although its beauty has lured more than one of our great poets to try its melodies, none has ever been quite successful in rivalling its fine cadences and long melodious movement. It remains, emphatically, Spenser's stanza. Byron with the coarse vigour of his rhythm and his rhetorical accents is farthest from it; Keats, perhaps, with a poetic genius which has much affinity with that of Spenser, is nearest in his Eve of St. Agnes; for Thomson, though his rhythm in The Castle of Indolence is a closer imitation of Spenser, has not the fancy nor

the same refinement of phrase.

But original as the Spenserian stanza is in its character, it must have some origin and ancestry, more or less definite. common view used to be that Spenser took his stanza with some slight modifications from the eight-line stanza or ottava rima of Italian poetry. On the other hand Mr. Skeat is of opinion that it is derived from the very different eight-line stanza which Chaucer uses in the Monkes Tale, by the simple addition of the Alexandrine at the close. Of these two derivations, the older may not be quite an adequate statement of the case, but it is nearer the truth than Mr. Skeat's view.

The eight-line stanza of Chaucer is, comparatively at least, a metrical failure, used by him only in two unimportant poems and soon discarded for the far more graceful and powerful seven-line stanza. In the Monkes Tale we can see what the eight-line stanza is, and how well-advised Chaucer was in giving it up. Here is an

example:

O mighty Cesar, that in Thessalye Ageyn Pompeius, fader thyn in lawe, That of thorient hadde al the chiualrye As fer as that the day biginneth dawe, Thou thurgh thy knyghthode hast hem take and slawe, Saue fewe folk that with Pompeius fledde, Thurgh which thou puttest al thorient in awe. Thanke fortune, that so wel thee spedde!

The defects of this stanza, as compared with the seven-line stanza and the ottava rima, are a want of compactness, a certain monotony of movement, and a weak close. No wonder then, what with the lugubrious nature of his matter and the want of vitality in the measure in which it is conveyed, the Canterbury Pilgrims soon have enough of the Monk and his tale. The knight brings him to a stop with a certain amount of courtesy on the score of the "hevinesse," that is, the sadness of his tale; but Harry the host's remarks are sufficiently significant as to the effect of the eight-line stanza on his not altogether uncritical ears:

Sir Monk, no more of this, so god yow blesse! Your tale anoyeth al this companye; Swich talking is not worth a boterflye; For ther-in is ther no disport ne game.

By heven king, that for us alle dyde, I sholde ere this har fallen doun for slepe Although the slough had never ben so depe:

And wel I wot the substance is in me, If anything shal wel reported be.

The inferiority of the eight-line stanza of Chaucer is easily seen on analysis of its structure. It virtually consists of two quatrains loosely united by the rhymes of their first and last lines respectively, but really tending to remain asunder and independent on account of the isolating tendencies of two perfect quatrains. Chaucer often tries to bind them together by the use of overflow in the middle couplet, but in spite of his efforts the verse is incapable of the fine unity of the Spenserian stanza. It remains loose and monotonous in its movement. Besides it closes feebly on a single rhyme, while a stanza of such length requires the full strong close which both the ottava rima and the Spenserian stanza possess. Instead of being a musical climax, the eight-line stanza

of Chaucer is with difficulty kept from anti-climax.

There is really nothing in it (for the similarity of the rhymes is only an external one) to suggest to Spenser his own wonderful stanza. Chaucer's seven-line stanza is fitter in its unity and flow to have been the model for Spenser. But it is more likely that Spenser got the hint for his stanza from the ottava rima of the Italians. Italian literature was all the vogue in his day, and Ariosto and Sannazaro were more spoken of in literary circles and even at the Universities than Virgil and Cicero. In Spenser in particular the influence of Ariosto is very obvious in his choice of materials and manner of treating his subject. Ariosto is in a strict sense of the word his model. There is a presumption therefore in favour of Ariosto as regard his choice of the measure in which he wrote his great poem, and from Ariosto's Orlando Furioso or Pulci's Morgante Maggiore Spenser might well learn how to give his long stanza the fine unity, the varied cadences, and the full and perfect close which it requires. For Spenser and his contemporaries, Italian poetry was the only modern poetry of much account, and the ottava rima was the measure of the only modern epics they knew. It was natural, almost inevitable that Spenser should make it, or some modification of it, the measure of his Faeric Queene. In this sense, then, Spenser in all probability got the suggestion for his stanza from the Italian poets. English readers will find a good example of the ottava rima in Keats's IAMES CAPPON. poem of Isabella.

## BOOK REVIEWS.

A History of Mathematics. By Florian Cajori, Professor of Physics in Colorado College. MacMillan & Co., New York and London, 1894, pp. 422, 8 vo.

THE History of Mathematics, and especially of early mathematics, ought to be interesting to others as well as to the mathematician, as it is merely a history of human thought, and in this particular case a history of beginnings. Besides the history of mathematics goes so far back as to be almost synonymous with the history of the beginning of civilizations. The most ancient people of which we have any account, the Egyptians and the ancient Babylonians, had their systems of mathematics, which in many cases were undoubtedly handed down from still earlier races. Moreover there is no History better calculated than that of Mathematics, to show the effect of superstitious religious dogmas upon the progress of pure thought. The study of mathematics migrated from country to country according to the influence upon it of the theology of different countries at different times, and in this respect it differed from philosophy, which was always more or less identified with the religion of its time. Thus after the murder of Hypatia and the closing of the School at Alexandria by Christian fanatics, because they did not want Pagan teaching, and Pagan knowledge, mathematics betook itself to the east and was cultivated by both the Hindoos and the Mahommedans. And it was through these that it was preserved and from these that it was brought back to the Christian nations of Europe after the dark ages had passed away. Professor Cajori has told us all about these things in a most pleasant way, and the best we can say of the book is that it is more interesting than any novel.

McClure's Magazine. S. S. McClure, Ltd. New York and London.

McClure's Magazine for March is a clever mixture of grave and gay. A biographical sketch of Ruskin by M. H. Spielmann and a sympathetic estimate of the late Professor Tyndall by Herbert Spencer may represent the former element, while short stories by Octave Thanet and Rudyard Kipling are good examples of the latter. Kipling's story has the clear mark in its original conception of character and situation and in some strong phrasing of the man who wrote Plain Tales from the Hills; but the subdued Sterne-like treatment of sentiment is not so much in his line. Conan Doyle gives a sprightly account of whale-fishing in the Arctic seas; and the taste for knowledge of literary celebrities and that for criminal statistics, etc., are gratified by special articles. On the whole the contents are superior in interest to those of most American magazines; and the price (15 cents) is certainly very little for so much clever writing and artistic illustration.

## CURRENT EVENTS.

M. Gladstone, it is announced, has retired and thus brought to a close one of the most astonishing political careers of our time. Amongst modern statesmen he is perhaps the only one whose career may challenge a comparison with those of his great continental compeers, Bismarck and Cavour, both in respect of the extraordinary personal influence which he possessed with his party and the nation in general, and the profound impression which he has left on its political history. hardly be carried further. Both the Italian and German statesman entered upon their career with a definite political ideal before them, that of transforming a number of isolated and independent states kept asunder by traditional antipathies and the jealous policy of their more powerful neighbours into one great and united nation. Both accomplished their task, the German by profound and patient preparation, by wonderful tenacity and the prompt almost unscrupulous employment, when the long awaited hour had come, of a splendid military organization; the Italian, whose resources to begin with were much less, by patient and subtle diplomacy, by a profound and clever manipulation of the foibles or interests of his greater neighbours, and by allying himself with the ruling power at the right time,—the traditional policy of the house of Savoy. Both statesmen had to be eminently constructive in their action, both had to be masters of foreign policy, for at every step they took forward they put to the hazard the destiny of their nation and the lives of thousands of their countrymen; both had to be as conservative as the time and the previous history of their respective countries permitted them to be. in the case of each statesman the whole nation may be said to have rallied confidently to the call of its great leader; and the steadiest elements in their following, after the hero-loving mob (not so great in Cavour's case, Garibaldi and Mazzini more than dividing the honours), have been the intellectual and the wealthy, the prudent and the practical amongst their countrymen.

The work of the English premier has been of a very different kind and presents on every side a strong contrast to that of his continental compeers. To begin with he was the statesman of an empire already built up, and strongly founded and fenced by a empire already built up, and soldiers before he was born. When heroic race of statesmen and soldiers before he was born. When heroic race of statesmen and soldiers before he was born. When heroic race of statesmen and soldiers before he was born. The great were all of a constitutional and economical character. The great were all of a constitutional and economical character, and begun, struggle of the new democracy against class privilege had begun,

and the formative period of his life as a statesman was passed amidst hot debates on Reform, on Franchise bills, on the Corn-Laws, on the Navigation Act, and the condition of the working To such questions Mr. Gladstone has devoted the most of his energy, to the exclusion of foreign politics, which he seems all his life to have regarded with aversion, if not with indifference. His principal achievements in that sphere, such as the memorable appeal on behalf of the Italian patriots and the Balgarian crusade, have been the personal achievements of Mr. Gladstone as an individual rather than of Mr. Gladstone, the premier. As to foreign policy, properly speaking, he has never had any, unless it were to avoid as far as he could all foreign politics, an excellent policy perhaps, if it can be safely carried out by an empire whose strength and prosperity depend very largely on the command of great ocean routes and distant markets. After he assumed the leadership of the Liberal party, an active foreign policy became the distinguishing badge of the Conservatives, and it was chiefly in foreign and imperial affairs that their great leader, the Earl of Beaconsfield, won his political laurels. But it must be recorded to Gladstone's credit, even by his adversaries, that he has not, especially of late years, allowed his own strong antipathies to interfere seriously with the character and continuity of the work done at the Foreign Office. The Earl of Rosebery, it is understood, has always had a comparatively free hand.

Meddling little with foreign affairs Gladstone has had the more time and energy to give to domestic policy. Since his accession to the Premiership we have had a series of great political changes with most of which Mr. Gladstone's name is so thoroughly identified that it may be said no other man but himself could have kept the Liberal party united in bringing them about. These are the Disestablishment of the Irish Church, the Irish Land Act, the abolishment of University rests, the establishment of the Ballot, the extension of the Franchise and lastly the sudden reversal of the traditional British policy on the question of Home The list itself explains sufficiently the kind of work Mr. Gladstone has performed. When the Reformed Bill of 1867 was passed by the Conservatives, the old Whig party had done its work and had practically ceased to be. Mr. Gladstone found himself at the head of a new party, the centre of which was composed of Liberals, mostly old Whigs of moderately progressive tendencies but the wings of which were formed by extreme groups each with its special cry, the Welsh and Non-conformist group with their cry of disestablishment, the advanced radicals with their cry of legislation for the masses and their diatribes against privilege and aristocracy; and, latterly, the Irish Home Rule members,

with their special cry of justice to Ireland. All Mr. Gladstone's great parliamentary dexterity and immense personal prestige have been acquired and employed in keeping these various sections of the Liberal party united in one forward movement. Some of his legislation, such as the abolition of Army Purchase and the Education Acts reflect particularly the path of progression favoured by the solid centre of the Liberal party. The rest of it represents more particularly the pressure of the extreme groups whose support is equally necessary to form his majority. Each of these extreme sections represents claims that require satisfaction as well as hatreds and prejudices that no British statesman can safely encourage. From this point of view some of Mr. Gladstone's sayings uttered in the heat of political campaigns may have been rash, such as his celebrated antithesis of "masses and classes," and his way of stirring up and appealing to the national prejudices of Scotchmen, Welshmen and Irishmen against English opinion. But we cannot see that his action has been so, at any rate to the same extent. Until the introduction of the Home Bill of 1886, his action has been the simple resultant of the various elements of the Liberal party which he led, the well calculated amount of concession which the centre of the party was disposed to make to its extreme sections. And in this way Mr. Gladstone has done work of great service to his country, easing the friction of classes, removing abuses, and giving natural and healthy play to the growing forces of democracy which might otherwise have risen into dangerous fermentation. There is no country where the interests of the working classes are so effectively represented, and there is no country where the working classes are so little subject to the illusory theories of extreme socialists and anarchists. The credit of this comparatively healthy state of things is due to Mr. Gladstone more than to any other man.

And his character has been formed by his work. His nature, always sympathetic and passionate, has been quickened by the constant championship of popular ideas into marvellous readiness of a response to all popular calls. His sympathies, his enthusiasm are evoked with perhaps dangerous facility, and seem of late years to have made his reason their servant rather than their governor. A popular cry has come to be the breath of life to him, and to stand, as I have seen him stand, in the Midlothian campaign of 1879 before tens of thousands of fervently admiring Scotchmen, denouncing in copious, fiery, impulsive language the crimes of a conservative ministry, and demonstrating the moral excellence of the Liberal programme from the re-distribution of constituencies to the guaging of ale casks, has become the characteristically

I have forgotten the points of the oration. There was not a great moment in his career.

sentence in it that Pericles would have owned either for matter or style; but I remember well that sea of eager upturned faces in the Waverley Market, and that impulsive triumphant outburst of twenty thousand voices into the Marseillaise Hymn, as the orator took his place on the platform. As far as words went, the song was inarticulate as the bellow of ocean, probably not half of the audience having more than a hearsay acquaintance with it; but the meaning of its music was clear to every heart, and the swell of that foreign democratic poean in the market place of the Scotch capital was more impressive than as I have heard it sung on a 14th of July eve by a Parisian crowd in the Place de l'Opéra. To these Scotch tradesman and shop-keepers it meant no doubt something less high-soaring and sanguinary, but what it did mean to them one felt was sure of its accomplishment between them I remember, too, the figure of the orator himself, tall and distinguished looking in a suit of black and decidedly simpatico, as the Italians say, with a certain sympathetic attractiveness about him: his body was generally bent eagerly forward towards the audience and both hands raised high above his head with an impassioned minatory gesture, as if he were, as was generally the case, condemning to speedy extinction some relic of aristocratic oppression or class privilege. Such were Mr. Gladstone's legitimate triumphs, more genuine, I imagine, than the professional applause of his party, at least of late, in the House of Commons. Even to the critical and unsympathetic onlooker there was something touching in the relations between the speaker and his audience, something consolatory even to those who have their doubts about the judgment of the democracy. They could not be far wrong in their meaning, in their aspiration, he and they; in their mutual intoxication of sympathy. But behind him stood the caucus leader, the manipulator of votes on the Disestablishment question and a score of Lilliputian wire-pullers who had their giant tied by a thousand threads, and who were already thinking how they could best exploit the sincerity of the moment.

It may be doubtful also if the applause of the populace is the best guide for the ruler. When the people cry out there is always a real grievance, a disease in the body politic, but the remedy they ask for is not necessarily the right one. Mere coercion may be no remedy, but neither may mere concession be. Until the Home Rule Bill of 1886, Mr. Gladstone's concessions had been mainly timely recognitions of the tendencies and growing strength of the democratic element in the nation; but when, by the way of concession to the Irish vote alone, he ventured upon a fundamental reconstruction of the relations between Ireland and the Empire, he undertook a problem very different from anything he had hitherto attempted, a problem requiring the

highest constructive genius on the part of the statesman who dared to take it up. He has failed signally. It is not the House of Lords Lords that has killed the Home Rule Bill. The House of Lords could not kill any bill which had the real force of the Liberal could not kill any bill which had the real force of the Liberal majority and the feeling of the nation to back it. It is the doubt, majority and the feeling of the nation to back it. It is the doubt, the faintheartedness, the lack of any genuine enthusiasm in the Liberal party itself with regard to the Bill, that has been fatal to it.

Mr. Gladstone's retirement will introduce a new era in English politics. The heterogeneous elements which have been kept together in the Liberal party by the prestige of his name, and a together in the Liberal party by the prestige of his name, and a personal influence that extended all along the line of the party personal influence that extended all along the line of the party personal influence that extended all along the line of the party personal influence that extended all along the line of the party personal whigs to the most daring of the from the most cautious of the old Whigs to the most daring of the Radicals, will hardly prove so tractable to Lord Rosebery, new Radicals, will have been kept to the most daring of the line of the party prove so tractable to the most daring of the line of the party prove so tractable to the most

THE condition of the Triple Alliance continues to be the chief political topic in Europe, especially in continental circles. Something has evidently happened to disturb the serenity and confidence of its virtual head, the German Emperor. Public opinion is probably right in attributing much significance to that almost ion is probably right in attributing much significance to that almost solemnly public reconciliation of the Emperor and his former solemnly public reconciliation of the Emperor and his former Chancellor which took place the other day. When such a pilot as Bismarck is called to the helm, or even only summoned aft to speak to the Captain, there are rocks ahead somewhere, and

It can hardly be that the late conjoint military demonstrations rough weather may be looked for. of France and Russia have produced this effect. The parade of the D the Russian squadron at Toulon was to be expected as a reply to the parades in Gallicia and at Metz. The Czar is apparently very willing to give moral and diplomatic support to France in her isolation. It is obviously the only way of counterbalancing what would otherwise be the overwhelming weight of the Triple Alliance, not to speak of the casual support which it may give to and receive from England on certain questions, But between that diplomatic support and an alliance for aggressive war is a very long step. The Czar could not afford perhaps to see France further. further and permanently weakened, but there are profound dynastic. dynastic and political sympathies between the Hohenzollerns and the Romanoffs which make it exceedingly improbable that the present Czar, who is old enough to have grown up under these traditions, would care to ride triumphant over German soil in company with the republican armies of France. The contrecoup would be too severely felt in his own dominions.

On the whole it looks as if Emperor William's uneasiness arose from something which threatens the internal stability of the Alliance. And it can hardly be doubtful where the weak spot is. Austria and Germany are tied to their posts, the first by its position in relation to the Balkan states, the second by the always

menacing phantom of a French war of revenge.

But it has always been a problem what Italy gained by entering into the Triple Alliance. She has nothing to fear from In spite of an irritable jealousy which exists between the two nations, unwisely stimulated by Italian talk about the primacy of the Latin races, especially by that foolish book of Gioberti's Il Primato; in spite of the remnant of a French clerical party that may still dream of a restoration of Papal Rome, and in spite of the periodical quarrels of French and Italian workmen on the Riviera, there is not the least ground for such a fear. Nor do the Italians themselves really have such a fear. The reasons for which Italy entered the alliance were obviously the positive rains she expected to make from it, for one thing, the formal honour of being recognized as a great power at international boards, the vanity of being a strong voice in international councils. But no solid or substantial advantage has she got from If she had visions of regaining Savoy and Nice and redeeming some or all of the other portions of Italia Irredenta, Corsica, Malta and the rest, the prospect of their realisation is at least, no nearer. She was not even able to save Tunis, on which she had her eyes, from the grasp of France. It is for an unsubstantial honour that she has burdened herself with debt and ground her citizens with taxation to support the unnecessarily large navy and army which are required not for her own needs, but for her place in the Triple Alliance.

There is no doubt that for a time the Italian people was pleased and flattered by the Triple Alliance. They had an exaggerated respect, it seemed to me at the time, for the new military glory of the German Empire. In allying themselves with it they followed too the traditional policy of Italy, defined long ago by Giucciardini, va dove si vince, "get on the winning side;" but they evidently counted upon something which has not happened. In the meantime their taxation is steadily increasing and their financial condition is becoming intolerable. Since Depretis, premier after premier has come and gone, none proving strong enough for the situation. Far better for Italy to have been content for a time with the position of a second class power, with moderate expenses and moderate taxation, to have grown gradually, and by the natural development of her industries and arts,

into the dignity of a great power capable of entering into alliances with great empires on equal terms and without ruinous sacrices with great empires on equal terms and without ruinous sacrices. Corsica, Nice, and the primacy of the Latin races, can afford to wait.

Signs are not wanting that the Italian people with its fine political instinct is slowly coming to this conclusion, which a political instinct is slowly coming to this conclusion, which a positive solid minded nation of Saxon breed would have reached positive solid minded nation of Saxon breed would have reached at the beginning. The curious feature is that Crispi who at the beginning. The curious feature is that Crispi who at the policy of the Alliance at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears with universal acclamation as premier at the present reappears ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years ago more than perhaps juncture, identified himself some years a

HE C. P. A., in what purports to be an official circular, contends that nearly all the public offices of any importance have become the property of Roman Catholics, that religious belief has behas become the test of fitness for subordinates, that contracts fall investigations to Rome invariably into the hands of those who owe allegiance to Rome, that large sums of money are yearly given away to the Roman Cathell Co. Catholic Church, while the Protestant Churches go a begging, that that there exists a conspiracy, masquerading under the joint close of cloak of loyalty and religion, to obtain entire control of the legislation and of the educational avenues of the country, and that a fully professed Roman Catholic ought to be barred from office, With because he is by virtue of his faith a bad public servant. regard to this unsparing attack on Roman Catholics and their Church of C. P. A. Church the most striking point is that the exponents of C. P. A. Dringing. principles are swayed by the very idea they condemn. They assume the sume that creed is a necessary factor in politics, and object merely that the that the churches to which they belong are not a sufficiently pronounced factor. If every count of their heavy indictment were proved, we could hardly sympathize with an Association, which moans over being thrashed when its only hope is to administer the the vertical that the state of The R. C. Church has doubtless some political That the hands of protestant denominations the thrashing. are not clean in the matter of secret political influence, it scarcely needs at the needed the formation of the C. P. A. to prove. Of course two wrongs do not make a right, but only magnify the evil. When we admit that the straining after power in politics is a fault common to the two great religious sects in Canada, we will be more concerned ourselves to see clearly, than to take the mote out of the eyes of our Roman Catholic countrymen. The Canadian Protective Association would best protect Canada from religious intolerance by first quietly putting itself out of the way.

It is a sign, not altogether hopeless, of our condition as a people that any society, which now seeks to make an impression, must announce its patriotism. Hence the P. P. A. changes its name to C. P. A. It would be more hopeful if the change of name carried a change of purpose. We may still fear that the Association, to use its own rhetoric, has put off the cloak of religion in order to masquerade in the cloak of loyalty. It was a small compliment to the other beasts, when they were unable to recognize the tones of the donkey because it wore a lion's skin; and it would be an equally small compliment to Canadians to suppose that they could be hoodwinked into believing that a society founded upon dissension, not to say hate, could promote national unity. Unanimity indeed is to be desired, but it would be purchased too dearly by the sacrifice of all who differ from us in points of religion.

The strength developed by the Patrons of Industry is an indication that farmers are taking a deeper interest in politics; and there are signs that this interest in politics implies an intelligent interest in the welfare of the country. Against one thing, however, the Patrons must be on their guard. It is the besetting weakness of an independent that he seeks to join with another independent, though the political ideas of the two may be as far asunder as the poles. With independents it is too often an afterthought that a new political association which must of course begin by being independent, might in office be more objectionable than either of the existing parties. Such a new society is the C. P. A. It is no mark of real independence in the Patrons to regard the C. P. A. as having the same right to exist politically as any inoffensive private Roman Catholic; nor is it any mark of real independence that a Patron may be a member of the C. P. A., though he must not be either a Liberal or a Conservative. Patrons are strong enough and sound enough to carve their way without making illicit offers of friendship.

Ontario has declared in favour of prohibition by a majority of 80,000, and Manitoba and Nova Scotia are of the same mind, but the majorities, large though they are, hardly represent the

strength of the temperance sentiment. Many voted 'No' who, though clear as to the need of reform, are opposed to prohibition, while many believers in reform abstained from voting. Notwithstanding the popular majority in favour of direct prohibition, a wise and cautious government will regard a prohibitory law as something to be approached rather by carefully graded legislation than by a spurt. The people ought to be satisfied in the first intance by a law which will make intoxicating liquors difficult to stance by a law which will make intoxicating liquors difficult to be procured by those injured by their use. Probably with experience of the working of such a law it will be found that what was ience of the working of such a law it will be found that what was really wanted has been obtained, and that our legislators were justified in refusing to give unreserved sanction to a sentiment which, though noble, has still to free itself from traces of fanaticism.

In Ontario women have already voted in a provincial matter, and the GLOBE seems to be feeling its way towards making the enfranchisement of women a plank in the policy of its party. Before the recent prohibition plebiscite was taken, the opponents of the enfranchisement of women argued that the result would be practically useless, because the women, not one of whom has a vote in provincial elections, would be all on one side. plebiscite, they maintained that the extension of the franchise to women was valueless, because the women's vote was divided and did not seriously modify the vote of the men. Such facile reasoners can easily blow hot and cold out of the same mouth. the real question is not what majorities the women would swell or diminish, but are they interested in public affairs? The signs of the times seem to be answering more and more plainly in the affirmative. If so, it is only a matter of time when Ontario will follow in the footsteps of New Zealand.

THE Wilson Bill, after getting through the House of Representatives in a fairly complete shape, has fallen among enerather favour the suspicion that the senators, especially the Demorather favour the suspicion that the senators and arguments which cratic senators, have had access to information and arguments which are not appreciated by the average citizen. But, whatever the nature of the information and arguments which influenced the senature of the information and arguments which influenced the senature of the outcome has been a triumph of special interests over public interests. Special trade corporations are alive, active, intensely interested, and have their energies directed towards one definite purpose. The public is indefinite, clumsy, composed of many conflicting interests, and expresses itself through representatives who are not likely to be so vigilant in the public interest as the representatives of the corporations are in their interests. Besides, where the people are themselves divided on any question

there is much scope for the free play of selfish motives among the Conscience can be argued with and remorse eluded even by fairly respectable politicians who undertake, for a consideration, to vote for that which they cannot at heart agree with, but which many of their constituents believe to be good. men are not afflicted with Kant's reverence for the moral law in the Virtue may be its own reward for one who is doing what he is sure is right, but there are other rewards which are a fairly good substitute when one is doing what others are sure is right. The senators may indeed have been as pure as snow in their motives for altering the Wilson Bill. In which case it is merely a curious coincidence that the chief alterations in the bill should have been in favour of great trusts, able and not unwilling, where necessary, to supply aids to intelligence. We are not of those who condemn trusts in the abstract. There are undoubtedly many good features connected with them which have yet to be recognised. But the good features are dependent upon the saving which the trusts are able to effect in the present wasteful methods of producing and selling goods. But saving is not encouraged when the government deliberately votes to the trusts a large subsidy to be drawn from the people's pockets, as is the case when they are favoured with a protective tariff in addition to the monopoly advantage which the trusts create. A low tariff or free trade will not destroy trusts, it may even increase their numbers, but it will give to their activities a legitimate direction; for they must then exploit nature instead of their fellow citizens. leading amendments which the Senate has made in the Wilson Bill certainly favour the evil features of the trusts and weaken

The Income Tax measure which is associated with the Wilson Bill is intimately connected with many important issues past and The protective system of the United States imposed an excessive tax on the people. The country being large and wealthy the returns were proportionally great. But the wealth did not all go to the protected capitalists, or become absorbed in the immense waste of capital and energy owing to the unnaturally laborious and costly methods of supplying wants which a protective system makes necessary. A portion of the tax collected went into the national treasury; but that portion had no relation to the needs of the government. It proved to be very much too large for all the legitimate purposes of even a government. surplus began to accumulate, which reached such unusual proportions during Mr. Cleveland's first administration that it threatened to interfere with the free use of the nation's currency. Mr. Cleveland proposed the natural remedy of lowering taxation,

and the Mills Bill sought to effect it; but the Senate-friend of the national infants of industry-threw it out. In the next campaign these venerable infants raised their perennial wail at the prospect of being weaned, with such unanimity and pathos that the national heart was touched and responded to their cry. The surplus having proved dangerous to protection had to be got rid of. There being no natural outlet for it, unnatural ones had to be provided. The end was achieved with a promptness and success quite unusual in government measures. Mr. Harrison and his friends entered on his presidential term with a treasury bursting with an accumulation of hundreds of millions; his last few months of office were rendered uneasy from the fear that he might be driven to adopt extraordinary financial methods to get money for the most pressing current expenses. But the Republicans not only squandered that immense hoard, they did what they could to settle the surplus problem for ever. They incurred permanent obligations which require a greatly increased annual outlay. They turned the surplus into a deficit, and now additional means of raising revenue must be sought. Direct taxation best adapts supply to needs, and an income tax, when properly graded, is theoretically both fair and safe. Practically the problem is; can an income tax be equitably levied and collected? That depends on the economic condition of the country and the honesty of the Modern production and exchange are so complex, the ramifications of trade and capital are so subtle and wide spread, that individual fortunes no longer have the distinctness and local limits which they used to have. They are merged in the general capital of the country, and the individual himself ceases to know what he is worth or what his net income is, since so much of a business man's income is the passing of portions of his capital through his hands. But, if the individual himself cannot separate the bone and marrow of gross and net income, how can a tax assessor do so, even if armed with the most extravagant powers of inquisition? Experience shows that personal honesty cannot be depended on, because, in the matter of taxation, many men have no honesty, and the others exhibit theirs in its least sensitive condition. On the other hand the income of those receiving salaries of a public nature can be accurately determined and the full tax levied. The result is that in practical operation now-adays the income tax is one of the most inequitable that can be levied, and so it will certainly prove in the United States.

ONCE more a final settlement of the Manitoba School Question has been reached, this time by the judges of the Supreme Court of Canada, to whom the matter was referred. For the sake of peace and quietness and the avoidance of those unpleasant-

nesses which arise from racial and religious jealousies, it were well if the matter could only remain settled. But, unfortunately, there are already signs that indicate a re-appearance of the whole question in as lively a form as ever. Taking the last decision of the Supreme Court, we observe that three of the judges upheld the rights of the Manitoba Legislature in the matter of its school acts, while two of the judges denied these rights. Looking at the grounds which they gave for their several opinions in the light of the B. N. A. Act, one cannot but feel convinced that each of the two opposite opinions is legitimate from a certain point of view. The majority opinion, following the practice of the higher British courts and especially of the Judicial Committee of the Privy Council, takes account of national progress and expresses the spirit of the constitution rather than its letter, while the minority opinion expresses the strictly judicial view which looks to the letter alone. Considering the number and variety of constitutions under which our country has been governed since the conquest, we might almost claim to rival in this line the liveliest South American republics. This variety has been plainly due to a lack of statesmen in Canada itself, and ignorance of colonial conditions on the part of the British Government. In lieu of statesmen Canada has had to be content with politicians. politicians have little interest in either past or future. For them the present is all-important. They live from hand to mouth, and frame new constitutions, not with a view to the essential features of national development and greatness, but with a view to the settlement of temporary political disturbances due to sectional jealousy, party conflicts, government corruption and oppression, or political dead-lock. The B. N. A. Act is not so bad as some that have preceded it; but lack of statesmanship in its construction is very evident from the short sighted, unworkable and temporary elements and purely sectional interests which it contains. Among the latter are the clauses of the ninety-third section relating to education, in which, among other defects, the constitutionally absurd position is taken that a provincial legislature may pass laws of a certain nature but is not at liberty to repeal them. As though a legislative body which could not be trusted to repeal its own laws could be trusted to make them. But, such features being in the constitution, they cannot be ignored by judges who do not consider it their duty to determine whether the law is good or not, but simply to determine what it is. On this groundthe two dissenting judges are justified in their opinion, But if it is the privilege and duty of the highest courts to consider what is the spirit of the constitution and what is agreeable or contrary to that spirit, then the decision of the three judges upholding the validity of the Manitoba school legislation is quite justified. In

this special case there were additional reasons why the court should take a liberal view of its powers. The question to be decided was not wholly legal but partially political, and was transferred from the government to the court in order to avoid inflaming party politics with delicate issues involving religious and racial differences. If we are to retain our present constitution and still make progress a free interpretation of its clauses is indispensable.

CONTRARY to common expectation the stoppage of the monthly purchases of silver by the United States Treasury. and the restriction on the free coinage of silver in India have produced no disastrous consequences throughout the world. They do not seem to have affected in any perceptible degree the steady decline in the value of silver which has been going on for a number of years. That decline is due simply to a lowering of the cost of producing silver. So long as the cost of producing silver continues to fall and no monoply combination is formed among the producers, the price of silver is absolutely certain to fall also, and all the governments in the world could not prevent it by simply increasing their purchases. The attempt to keep the price of silver considerably above its cost of production by increasing the purchase of it is exactly on a par with the attempt to dry a square yard of the ocean's bed by pumping the water off To accomplish the latter object one must absorb all the silver that can be produced by the floating capital of the world, for the profits of producing silver being kept so much greater than the profits of producing other articles would sooner or later attract all the floating capital to its production. It is a mistake to suppose that at any time the price of silver was really being kept up by the monthly purchases of the United States Treasury. matter of fact these purchases were hastening its decline. a well exemplified fact in commerce that when the sale for an article is considerably increased and the field for the employment of capital in producing it is enlarged, there result improved methods of production, greater use and specialization of machinery, the discovery of new processes, new sources of raw material, etc., all of which lower the cost of production, and a fall in the selling price follows as a natural consequence. Doubling the demand for cotton or iron almost halves the price; and so it is with other articles in greater or lesser degree, when the raw material is not too limited relatively to the need for it, and there is now no danger of that in the case of silver. We may safely predict that if any international attempt is made to raise and permanently maintain the price of silver, it will have just the opposite effect, and that in a very short time.

CURELY if the gods take any interest in Canadian affairs they must find abundant occasion for laughter or for tears, according to their point of view, in the capers which our politicians cut before the face of heaven. Take, for instance, the position of the government with reference to the proposed Atlantic and Pacific steamship lines, which are now receiving so much attention. Steamship lines, ocean cables, and other aids to international trade must ever be welcome to free traders, or to those who believe in a moderate tariff for revenue purposes only. The aim of each of these classes is to stimulate international trade in both exports and imports—exports of what we can most easily produce and imports of what we can less easily produce. Not national independence, but national interdependence is regarded as the proper ideal; hence the desire for free and direct intercourse. But it puzzles one to discover what a protectionist can find to admire in the developement of international trade facilities, unless, perhaps, as merely fashionable and ornamental fringes for the national skirts. And, indeed, if we take note of the way in which the politicians refer to these things, this latter idea becomes rather more than a suspicion. The government way of explaining the situation in the concrete language of fact may be condensed thus. We are bound to establish new and fast lines of steamers on the Atlantic and Pacific. At the same time protection to home industries, both actual and prospective, must be firmly maintained. The ideal sought is as complete a discouragement as possible of most imports. This of course, so far as successful, will discourage exports too, by preventing a natural return for them, and by causing the shipping companies to charge higher freights when there is so little for them to carry, especially on the incoming trips. But as we anticipate very considerable success in our restriction of foreign trade, it must be obvious that, even charging the highest rates practicable, the companies will require very large annual subsidies. These we propose to pay out of the fine, which we shall collect from those who still persist in using the steamer to import foreign wares. So, you see, even if we gave up the protective idea—which God forbid we should still have to collect these fines in order to make up the subsidies which are themselves made necessary by reason of collecting the fines. Quite so we say. And what about those other steamship lines which are already serving the country, and which have to charge higher than normal freight rates on account of your successful restriction of trade? That, says the government, we are just about to attend to. We propose to regulate and reduce their rates by law, for the benefit of exporters. markable country this, we say; and the gods laugh or weep according as the humour or pathos of the situation strikes them.