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Darwin's Theory of Conscience: ITS RELATION TO

SCIENTIFIC ETHICS.

MIGHTH LECTURE IN THE COURSE OF SUNDAY AFTERNOON LECTURES, DELIVERED UNDER THE AUSPICES OF THE PREE RELIGIOUS ASSOCIATION IN HORTICULT-URAL HALL, BOSTON, FEB. 22, 1874.

BY FRANCIS E. ABBOT.

It is the object of this lecture to state the leading features of Mr. Darwin's theory of conscience, as contained in the second volume of his Descent of Man; then to sketch in outline the fundamental principles of Ethics, regarded as a Natural Science independent of all supernatural revelation, whether real or supposed; and finally to show the relation which the great doctrine of Evolution, and more particularly Mr. Darwin's application of it, bears to Ethics so considered and treated. In carrying out this purpose, I must at the outset beg your indulgence, if the nature of our subject obliges us to travel through unbeaten paths, and to encounter the rocks and thickets which such paths will naturally oppose to our progress. I trust that your patience and goodnature will not be exhausted, although we shall find ourselves involved in discussions of an abstract and possibly arid character, from which the necessity of brevity will exclude the frequent illustrations and digressions so agreeable to the tired mind in the arduous pursuit of truth. If I have erred in regarding the audience of this "Course of Sunday Afternoon Lectures" as the most intellectual one which it has ever been my privilege to address, you will pardon me for bringing before you a paper which perhaps ought to be read rather than listened to; for the mistake will have been due to the high conception I entertain of your requirements, and to my conviction that this Course is sustained and attended for the sole purpose of affording an opportunity to your lecturers of communicating the results of researches which concern the profoundest subjects of human thought, and which find elsewhere no fitting place of announcement. I will make no apology, therefore, for omitting everything of a merely popular character from this lecture, and for treating its subject in the most clear, condensed, and consecutive manner which my necessarily hurried preparations have permitted.

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which my necessarily hurried preparations have permitted.

Sir William Hamilton quotes from Immanuel Kant, as the best example he can find of the sublime, in all three of its highest forms, the well-known passage commencing with the following words: "Two things there are which, the oftener and the more steadfastly we consider, fill the mind with an ever new, an ever rising admiration and reverence; the Starry Heavens above, the Moral Law within." Mr. Darwin quotes from the same great thinker another passage which is certainly no less exalted: "Duty! Wondrous thought, that workest neither by fond insinuation, flattery, nor by any thret, but merely by holding up thy naked law in the soul, and so extorting for thyself always reverence, if not always obedience; before whom all appetites are dumb, however secretly they rebel; whence thy original?"

This great question—"What is the origin of the moral sense of man?"—is the question propounded by Mr. Darwin; and after saying that it "has been discussed by many writers of consummate ability," he adds, with a modesty which wins from all his candid readers an admiration ready to melt into a warmer sentiment still: "My sole excuse for touching on

he adds, with a modesty which wins from all his candid readers an admiration ready to melt into a warmer sentiment still: "My sole excuse for touching on it is the impossibility of here passing it over, and because, so far as I know, no one has approached it exclusively from the side of natural history." [Descent of Man, II., 68.] In this unpretending manner Mr. Darwin introduces an examination of the origin of the moral sense in man which, simply because it is the first attempt to approach the problem purely from the side of natural history or science, I must rank among the most profoundly important contributions ever made to what has been hitherto vainly styled the "Science of Ethics," Incomplete as I

think it is, it nevertheless marks the era when first the scientific method extended its domain so far as to include the realm of morals within its lawful jurisdiction. In this lies the greatest and the permanent significance of Mr. Darwin's theory of conscience. I cannot say that I view his theory as coëxtensive with the facts; I must admit that he passes by some facts which "natural history," indeed, is not called upon to consider, yet which science in a larger sense will find essential to a complete theory of morals. But what he states affirmatively is true, in the main, and of the highest value; it will hereafter never be omitted in any philosophy of human nature which aspires to treat its subject in a comprehensive and scientific manner; and it gives suggestion and specific direction to a host of inquiries and unvestigations which his general theory alone was sure sooner or later to elicit. When the twentieth century comes to count over the jewels bequeathed to it by its predecessor, the great impulse given to thought by the patience, knowledge, and genius of Charles Darwin will be among the brightest and most glorious; while the magnificent magnanimity with which he has always gone out of his way to acknowledge any small indebtedness to others, and to praise even his open antagonists for whatever truth they may have brought to light, has made it henceforth impossible for scientific controversy to decline again to the miserable jealousies of the past, without incurring the swift and indigthink it is, it nevertheless marks the era when first light, has made it henceforth impossible for scientific controversy to decline again to the miserable jealous-ies of the past, without incurring the swift and indig-nant rebuke of a world which has now seen what no-bility and dignity can be imparted to the warfare of ideas by the self-forgetting love of truth.

DARWIN'S STATEMENT OF THE THEORY.

To proceed to the immediate task in hand, permit me now to summarize the theory of conscience which Mr. Darwin has advanced. It will be best to do this in his own words:

"The following proposition seems to me in a high degree probable—namely, that any animal whatever, endowed with well-marked social instincts, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well develas its intellectual powers had become as well developed, or nearly as well developed, as in man. For, firstly, the social instincts lead an animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them. The services may be of a definite and evidently instinctive nature; or there may be only a wish and readiness, as with most of the higher social animals, to aid their fellows in certain general ways. But these feelings and services are by no means extended to all the individuals of the same species,—only to those of the same association. Secno means extended to all the individuals of the same species,—only to those of the same association. Secondly, as soon as the mental faculties had become highly developed, images of all past actions and motives would be incessantly passing through the brain of each individual; and that feeling of dissatisfaction which invariably results, as we shall hereafter see, from any unsatisfied instinct, would arise, as often as it was perceived that the enduring and always present social instinct had yielded to some other instinct, at the time stronger, but neither enduring in its nait was perceived that the enduring and always present social instinct had yielded to some other instinct, at the time stronger, but neither enduring in its nature nor leaving behind it a very vivid impression. It is clear that many instinctive desires, such as that of hunger, are in their nature of short duration; and, after being satisfied, are not readily or vividly recalled. Thirdly, after the power of language had been acquired and the wishes of the members of the same community could be distinctly expressed, the common opinion how each member ought to act for the public good would naturally become to a large extent the guide to action. But the social instincts would still give the impulse to act for the good of the community, this impulse being strengthened, directed, and sometimes even deflected, by public opinion, the power of which rests, as we shall presently see, on instinctive sympathy. Lastly, habit in the individual would ultimately play a very important part in guiding the conduct of each member; for the social instincts and impulses, like all other instincts, would be greatly strengthened by habit, as would obedience to the wishes and judgment of the community." [pp. 68-70.]

ANOTHER STATEMENT.

ANOTHER STATEMENT.

From the above and succeeding statements of Mr. Darwin, I gather the following as a digest of the leading principles of the theory under consideration:—

1. "A moral being." he says by way of definition, "is one who is capable of comparing his past and future actions or motives, and of approving or disapproving of them. We have no reason to suppose that any of the lower animals have this capacity; therefore when a monkey faces danger to rescue its comrade, or takes charge of an orphan-monkey, we do not call his conduct moral. But in the case of man, who alone can with certainty be ranked as a moral being, actions of a certain class are called moral, whether performed deliberately after a struggle with opposing motives, or from the effects of slowly gained habit, or impulsively through instinct." [p. 85.]

2. Any animal becomes moral as soon as it acquires sufficient mental power to compare its various motives and actions in the past, the present, and the future, so as to pronounce some of them right and others wrong. The acquisition of a moral sense, therefore, depends on the prior acquisition of a certain degree of intellectual power; this Mr. Darwin, as above quoted, explicitly states. [p. 69.]

3. The difference between man and the higher ani-

intellectual power; this Mr. Darwin, as above quoted, explicitly states. [p. 69.]

3. The difference between man and the higher animals is one of degree rather than of kind; but in a broad way man is now to be classed as moral, while they are non-moral. [pp. 67.85, 101.]

4. "The moral sense is fundamentally identical with the social instincts." [pp. 93, 94.] In them is its origin; and its later development is only their higher manifestation, as modified and directed by increased mental power. Man's moral sense results from his nature and experience as a social being.

5. The social instincts were in the first instance called into existence through the law of Natural Secalled into existence through the law of Natural Selection: "Such social qualities [as sympathy, fidelity, and courage], the paramount importance of which is disputed by no one, were no doubt acquired by the progenitors of man in a similar manner, namely, through natural selection, aided by inherited liabit; [18] "This instinct lof symmathy no doubt and only the control of the c through natural selection, aided by inherited habit, in [p. 156.] "This instinct [of sympathy] no doubt was originally acquired, like all the other social instincts, through natural selection." [p. 158.]

6. The social instincts are "innate in the lower animals." and there is no resourt to support the social instincts.

6. The social instincts are impate in the lower animals;" and there is no reason to suppose that the case is otherwise with man. It is unlikely that the moral sense is acquired freshly and independently of ancestral inheritance by each individual. [p. 68,

ancestrai inheritance by each individual. [p. 68, note.]

7. The social instincts are permanent and everpresent, but not so powerful as the transient impulses of hunger, thirst, self-preservation, lust, vengeance, and so forth. If the power of reflecting upon past actions, and of comparing their motives with present motives, is not yet developed, no moral consciousness can appear; but where this power is developed, the sacrifice of the enduring instincts to the transient ones becomes, when the vivid impression of the latter has sacrifice of the enduring instincts to the transient ones becomes, when the vivid impression of the latter has faded away, the cause of regret and remorse. The moral sense is thus reduced to a conflict of instincts, the victory of the strong transient instincts over the feebler permanent instincts, and the dissatisfaction that ensues when in recollection the victorious transient instincts, now dormant, seem to have been feebler than the conquered social instincts which are still active in the mind. This remembered dissatisfaction enters into the next conflict, however, as a new motive reinforcing the feeble social instincts; and if the two combined vanquish the urgent transient impulses, then a high degree of satisfaction ensues on afterthen a high degree of satisfaction ensues on afterwards recalling the struggle in memory. This is moral self-approval.

moral self-approval.

8. After repeated conflicts of this sort, the force of habit comes in to augment the ease with which the habit comes in to augment the permanent or the habit comes in to augment the case when victorious instincts, whether the permanent or the victorious instincts, whether antagonists. If the victorious instincts, whether the permanent or the transient ones, overcome their antagonists. If the victory is repeatedly won by either class of instincts, the force of habit increases its strength in every succeding conflict; and thus the moral sense, that is, the tendency of the social to conquer the anti-social instincts, acquires by degrees an increased or dimin-

ished power.

9. When habit has thus strengthened the moral sense in any individual until the victory of the moral sense in the tendance thus see sense becomes almost certain, the tendency thus acquired becomes transmissible to offspring, reappearing in them as a stronger natural moral endowment, or innate tendency to virtue. In this manner inherited virtues or inherited vices become compressional transitions of the strain o hensible.

10. The fact of language, bringing to bear upon each individual the new motives of hoped-for praise or dreaded blame,—that is, of public opinion,—also exercises a powerful influence in developing further the moral sense which has had its origin in the social

instincts of the individual.

11. The moral sense thus developed out of the social instincts will vary according to the social requirements of different animals, or different communities of the same animal. The social instincts munities of the same animal. The social instincts will simply prompt to such actions as are for the good of the community concerned. Different social circumstances, requiring different lives of action, will thus tend to evolve different types of conscience; and actions which are social or good in one community will be anti-social or bad in another. Mr. Darwin puts the extreme case of supposing men reared precisely under the same condition as bees; in which case the unmarried female would, like the workerbees, kill their brothers, and mothers would stript to kill their fertile daughters. Whatever, in short. kill their fertile daughters. Whatever, in short, should promote the good of the community would be right; and whatever should have a contrary effect would be wrong. [p. 70.] Mr. Darwin, therefore, takes, "as the test of morality, the general good or the bees, this would require the murder of drones by the workers, and of young queen-bees by their mothers; and this, Mr. Darwin thinks, would be approved by the moral sense of the bee-community, if they came to have any.

came to have any.

12. Lastly, we arrive at the following statements as the nearest approach made by Mr. Darwin to a precise definition of "conscience": "At the moment of action, man will no doubt be apt to follow the stronger impulse; and, though this may occasionally prompt him to the noblest deeds, it will far more commonly lead him to gratify his own desires at the expense of other men. But, after their gratification, when past and weaker impressions are contrasted with the everenduring social instincts, retribution will surely come. Man will then feel dissatisfied with himself, and will resolve, with more or less force, to act differently for the future. This is conscience; for conscience looks backward and judges past actions, inducing that kind of dissatisfaction which, if weak, we call regret, and, if severe, remorse," [p. 87.] "Thus at last man comes to feel, through acquired and perhaps inherited habit, that it is best for him to obey his more persistent instincts. The imperious word ought seems merely to imply the consciences of the existence of a persistent instinct, either innate or partly acquired serving him as a guide though highle to be dismerely to imply the consciousness of the existence of a persistent instinct, either innate or partly acquired, serving him as a guide, though liable to be disobeyed. We hardly use the word ought in a metaphorical sense when we say hounds ought to hunt, pointers to point, and retrievers to retrieve their game. If they fail thus to act, they fail in their duty and act wrongly." [p. 88.] But this seems to be the clearest and compactest definition given by Mr. Darwin: "Ultimately, a highly complex sentiment having its first origin in the social instincts, largely guided by the approbation of our fellow-men, ruled by reason, self-interest, and in later times by deep

religious feelings, confirmed by instruction and habit, constitute our moral sense or concombined, cons ence." [p. 159.] cience."

TWO LEADING CRITICISMS.

TWO LEADING CRITICISMS.

Now do we not all perceive and feel that there is a vast amount of truth in this ethical theory of England's greatest living thinker? Yet do we not also all perceive and feel that it falls to gather up and unite all the truths that belong to his subject? Two thoughts may have forzed themselves upon your minds, as they have upon mine:—

First, that this theory, reducing the moral sense in the last analysis to an individual's instinct,—and placing the supreme test of morality in the welfare of a community, although it is conceded that the welfare of different communities may require in a given case diametrically opposite courses of conduct.—fails to furnish any ideas or principles of right which are universal and absolute in their application, equally valid for all times and climes; and,

Secondly, that this exclusively subjective validity of the moral sense, and the total absence of universal principles or ideas of right, disqualify the theory for the moral sense, and the total absence of universal principles or ideas of right, disqualify the theory for morals, which, like all other sciences, must be both objective and universal.

Various other criticisms or interrogations naturally occur at different points of the theory; yet to my wind they are subporting to the two I have men.

both objective and universal.

Various other criticisms or interrogations naturally occur at different points of the theory; yet to my mind they are subordinate to the two I have mentioned. Important, however, as they are, they are consistent with a full recognition of the substantial truth of the theory, so far as it goes; and it would be approximately correct to say that it is true in what it affirms, and false only in what it omits to affirm. To be sure, the omitted truths would require modification in some of its positions; but the theory of Mr. Darwin (who has by no means made it his object to set forth a complete science of morals, but only to trace the development of the moral sense) has nevertheless its true place as part of such a science. The work he has done is invaluable, and could certainly have been done by no hand less masterly than its; and the two criticisms I have made do not in the least degree detract from its value, but simply point out the absolute necessity of doing other work also, before it will be otherwise than an abuse of words to speak of a "science of morals." There is a superabundance of ethical systems in the world; but, so far as I know, no attempt has yet been made to study abundance of ethical systems in the world; but, so far as I know, no attempt has yet been made to study and group ethical facts by the same scientific method which obtains with reference to all sciences not "falsely so called." President Porter, of Yale Coluge, has just reviewed a new treatise in two volumes, by H. J. A. Körner, entitled Natur-Ethik, which may possibly be an attempt in this direction; but I cannot speak from knowledge of it. So long as there is only here and there a solitary thinker who does not deride the idea of applying the strictly scientific method to morals, religion, and philosophy, it tific method to morals, religion, and philosophy, it would be irrational to expect attempts of this nature. But for now many years I have ceased to expect light from any other quarter; and I must ask pardon for the presumption of now trying to sketch in outline, under three chief divisions, what I have ventured to

SCIENTIFIC ETHICS.

- I. MORAL OBLIGATION AN OBJECTIVE REALITY; SCIENTIFIC ETHICS AS GROUNDED ON THE NATURE OF THINGS.
- 1. Science Concerned with the Objective and Universal. All science must rest on that which is objective and universal. There is no possibility of resting it on that which is subjective; for science deals primarily with general relations, which can be expressed in general terms. The word species denotes simply a relation of resemblance among many individual objects; the word genus denotes simply a relation of resemblance among many species. Classification and generalization belong to the very essence of science; and they conduct immediately beyond the region of subjectivity, which is peculiar to the individual. The subjective is individual; the objective is universal. Science, therefore, is concerned only with the objective and the universal. All science must rest on that which is objective tive and the universal.

2. Ethics the Science of Socio-Moral Relations.

2. Ethics the Science of Socio-Moral Relations.

Ethics is concerned only with the various relations subsisting among moral beings, as such. It deals with the facts of conscience,—that is, con-science, or what all moral beings know, or should know, regarding their mutual relations; and therefore it might be properly defined as "The Science of Rights and Dutles among All Moral Beings, considered as Members of a Universal Society." Rights and duties signify the same essential fact, viewed differently: a common right is a duty which all individuals owe to each other; a common duty is a right which all individuals may claim from each other. For instance, the enjoyment of freedom is a right of the individual as ogainst all other individuals, while it is a duty of all individuals as towards each other; in other words, the enjoyment of freedom is a right which belongs to every individuals to respect it. All right and all duties,—all the facts of conscience with which being deals as excitated that the section of the conscience with which being deals as excitated the section. belongs to every individual, and it is a duty incumbent on all other individuals to respect it. All right and all duties,—all the facts of conscience with which Ethics deal,—are social in their nature; they imply society,—they depend on society,—they would vanish without society. If society could be abolished,—if the moral nature which directly or indirectly has grown out of man's social relations could be expunged from his constitution,—all his rights and duties would be abolished also, and morality would vanish from his character. It may be difficult to believe this; yet analysis will show it to be true. "Benevolence, justice, truthfulness, purity, order," to which Archbishop Whately reduces all other virtues, are strictly social in their nature; they concern others as well as ourselves. Suppose (or try to sup-

pose) an absolutely isolated and unrelated moral being, alone in the universe, devoid of all that grows directly or indirectly out of social relations, education, and conditions. He could not be truthful or untruthful, kind or unkind, just-or unjust, chaste or unchaste, orderly or disorderly; for all morality implies moral actions, and there would be no possibility of exercising either the virtues or the vices. We cannot, it is true, conceive such a being; we cannot divest him of the attributes which result from social conditions; we cannot imagine what could remain to him after all social relations and their subtile influences had been absolutely cancelled. Even the socialled "self-regarding virtues" could not belong to him. An absolutely unrelated being would be sezalled, sex implying a relation of duality; chastity, therefore, could not exist. Temperance would be no virtue; for intemperance is a vice because of the evils it inflicts on others, the social degradation it causes to oneself, the incapacity for social duties it entails, and the intrinsic loss of self-respect which ensues on unfitting oneself for these innumerable duties. Even self-respect means respect for self as faithful to all rights and duties as a member of society; if it is supposed to mean the relation one bears to himself, this very supposition is to create an artificial social relation with himself; and when all social rights and duties vanished, there would be nothing left for self-respect to rest on. Lastly, no duties to God can be conceived to remain; for duties to God imply a social relation between him and us, since he, as a moral being, is a member of the great society of all moral beings, and all social relations by the suppose) an absolutely isolated and unrelated moral beimply a social relation between him and us, since he, as a moral being, is a member of the great society of all moral beings, and all social relations by the supposition are imagined to be abolished. Besides, we owe no duties to God which are independent of our duties to each other; love, reverence, gratitude, and so forth, are improperly considered duties. Thus it appears that so-called duties to self and to God are ultimately reducible to social duties; that Ethics deal with social rights and duties alone; and that, social rights and duties being objective and universal relations among all moral beings, Ethics deal with the objective and universal, which is the subjectmatter of all science. It follows that Ethics are one of the sciences, as truly as astronomy or geology.

3. Moral Obligation an Objective and Universal Fact.

I have shown that Ethics treat of rights and duties among all moral beings, as objective and universal facts. This is only to state in other words that Moral among at moral beings, as objective and the Moral Obligation is itself an objective and universal fact; for rights and duties are merely moral obligations resulting from the coëxistence of moral beings in social relations. These obligations are not accidental or fortuitous; they are not one thing here and another thing there; they exist all the same, whether understood or misunderstood; they are not the result of any artificial compact, and can neither be created nor destroyed by any artificial means. For instance, the moral obligation of all men to be just to each other does not in any degree depend on any individual or collective action they may take; their laws do not create justice. or the obligation to be just, but, on the contrary, are based on this well-recognized obligation, which they at least pretend to embody and execute. In other words, Moral Obligation is not only an objective and universal fact, but it is also a necessary fact.

4. Moral Obligation a Part of the Nature of Things. If Moral Obligation is not only objective and universal, but also necessary, then its true grounds must be sought far deeper than in any voluntary or artificial arrangements among men. All such arrangements presuppose it, but cannot originate it. Moral Obligation, therefore, is not a result of society, but lies deep down in the very conditions which make society possible,—conditions which may or may not be understood, but which, in proportion as they are understood and complied with, render society what it ought to be. The perception by men of what Moral Obligation is and demands, as the necessary condition of all society that is rightly constituted, may be clear or obscure, obeyed or disobeyed; but Moral Obligation exists none the less from the very moment when two moral beings enter into social relationship, that is, from the very moment when society begins, even in its lowest and crudest forms. Back of all association lie the conditions which determine it; social union does but create relations in actuality which in potentiality existed ab acterno. In other words, the Moral Obligation which constitutes the groundwork of all society, that is, the coëxistence of moral beings in social relations, and which is the subject-matter of Ethics as one of the natural sciences, is almoly a part of the ultimate If Moral Obligation is not only objective and uni-ersal, but also necessary, then its true grounds and which is the subject-matter of Ethics as one of the natural sciences, is simply a part of the ultimate Nature of Things. Deeper than that no plummet can sink.

5. The Nature of Things.

The Nature of Things, on which I have shown that Scientific Ethics are ultimately grounded, is the totality of the necessary and absolute conditions without which nothing could exist. Moral Obligation is a part of it, but by no means the whole of it. The real character of Scientific Ethics, and the profound import of the principle that Scientific Ethics are grounded ultimately on the Nature of Things, will be best brought out, if I refer to some of the different classes of ultimate facts covered by the phrase.

A. Necessary and Contingent Relations.

There are two classes of relations, equally objective but not equally universal. A necessary relation is one which could not be supposed to be otherwise without involving utter absundity; that is, without violating the fundamental laws of thought. A contingent relation is one which could be supposed to be otherwise without any absurdity. For example: be otherwise without any absurdity. For example: every pebble, whether large or small, has an outside and an inside. It cannot without contradiction be

supposed to have only one of the two; Omnipotence itself cannot be supposed to be able to create a ble which had an outside, but no inside; the itself implies the corresponding word. So also there could not be a father without the present or past existence of a child; if the child did not exist or had could not be a father without the present or past existence of a child; if the child did not exist or had not existed, the man could not be a father. These cases illustrate what is meant by a necessary relation; that is, one which could not possibly be other than it is. 'n the other hand, a pebble might be either on or under a particular plank: there would be no absurdity in supposing either case. The pebble must have an outside and an inside; but might be either on or under the plank. The relation, then, between the outside and the inside of the pebble is a necessary or irreversible one; while the relation between the pebble and the plank is a contingent or reversible one. The distinction turns on the ultimate laws of thought, which are irreversible, and which do but express the necessity of things; that is, if science is possible at all. Whatever contradicts these ultimate laws is impossible; whatever they absolutely demand is necessary. No science can exist at all, if these principles are false; but all would then be illusion and deceit. This alternative I do not consider; for I claim for Ethics no more than the other sciences claim for themselves. sciences claim for themselves.

B. Various Classes of Necessary Relations.

B. Various Classes of Necessary Relations.

There are various classes of necessary relations, of which I will give a few examples, in order to explain what I mean by the Nature of Things:—

Metaphysical: All events occur in space and time. Sometimes people who would pass for philosophers talk of existing hereafter outside of space and time; but they use words absolutely without meaning.

Physical: A moving body passing in a straight line from one point to another must pass through all the intervening points. To suppose the contrary would be absurd; and what is absurd cannot be true in fact. Else science is impossible.

absurd; and what is absurd cannot be true in fact. Else science is impossible.

Mathematical: Every square can be divided by a diagonal into two equal triangles. If anybody doubts it, he can try the experiment.

Moral: Justice is a virtue; every just deed deserves the approbation of all moral beings. These propositions are exactly as necressary, objective, and universal, as any of the foregoing; they are, therefore, exactly as much the subject, matter of science. actly as much the subject-matter of science.

C. Necessary Relations Conditions of Existence.

Now the totality of all these and other necessary relations is the Nature of Things; which sums up all the ultimate conditions of all real existence. Whatever exists at all must exist in compliance with these ever exists at all must exist in compliance with these conditions; to suppose the contrary is to be irrational, that is, unscientific. For example, we may suppose a time before which no square had ever been described as an actual mathematical figure; and then the relation of equality between the two triangles made by its diagonal could not be said to exist, except as the blank condition which would determine the properties of every square that should ever be called into existence. The relation itself had as yet no actual existence: it only existed potentially, as the law by which the properties of every possible square were determined beforehand. The moment the first square was drawn, the relation referred to was exemplified and the blank condition turned into an actual mathematical truth. That is, this necessary relation was and the blank condition turned into an actual mathematical truth. That is, this necessary relation was one of the absolute conditions without complying with which no square could ever be made; all squares that ever shall be made hereafter must comply with it; there is no possibility of the contrary. It therefore constitutes part of the ultimate Nature of Things, independent of all will, uncreated, eternal, necessary, absolute. To suppose the contrary is to commit suicide as an intelligent being, and to pronounce all the science of the world a dream of delirious imagination. ous imagination.

D. Moral Obligation One of these Conditions.

D. Moral Obligation One of these Conditions.

If this is true of the relation between the two triangles made by the diagonal of the square, it is every whit as true of the relation between the first pair of moral beings that ever came into existence,—every whit as true of all the other moral beings that have hitherto, or may hereafter, come into existence. The relation of mutual Moral Obligation among all moral beings is just as objective, just as universal, just as necessary, as the relation between the double triangles of the square. The square might not have existed; the moral beings might not have existed; the moral beings might not have existed; the would be absurd to suppose a square whose two triangles should not be equal; and it would be just as absurd to suppose two moral beings in social relations without being under mutual moral obligation. There is, therefore, no rational escape from the conclusion that "Moral Obligation is an Objective Reality, and Scientific Ethics are Grounded on the Nature of Things."

II. MORAL INTUITION A SUBJECTIVE REALITY: SCI-

II. MORAL INTUITION A SUBJECTIVE REALITY: SCI-ENTIFIC ETHICS AS GROUNDED ON HUMAN NAT-

1. Analysis of the Moral Nature.

"Conscience" is a complex faculty, and needs to be carefully analyzed for the purposes of exact thought. It includes three chief elements, Moral Intuition, Moral Sentiment, and Moral Power.

A. Moral Intuition.

A. Moral Intuition.

The word intuition is one of the best-abused words in the English language. Used to denote a supposed special faculty for authenticating the existence of God and the immortality of the soul, intuition is arrayed against science, and shows itself to be indeed thoroughly unscientific, being made to serve as a sort of shelter or break-water against the approach of investigation, and thus occupying in some forms of

Theism the position held in Christianity by the principle of unreasoning authority. But while intuition so considered is a hindrance to knowledge, and a broken reed to lean on, there is a kind of intuition which is indispensable to science itself, constituting as it does the substance of every cognitive act. Although I have been especially careful to specify exactly in what sense I repudiate intuition, I have been widely misunderstood to repudiate it altogether; and it is probably true that the sense in which I accept it will not at all answer the demands of those who are anxious to vindicate intuition as a possible substitute for exact knowledge. Not to enter now into any general discussion of this subject, it will be sufficient for my purpose to define moral intuition, as the words are used in Scientific Ethics, as follows: Moral Intuition is the immediate perception of a definite, objective, and necessary Moral Obligation, as a Social Relation between Moral Beings. In other words still, it is the immediate recognition of a particular moral obligation, imposed upon moral beings by the Nature of Things just as soon as they enter into social relations. Moral Obligation is an objective fact necessarily involved in the fact of society among moral beings; and Moral Intuition is the immediate perception of this objective fact. Without the objective Moral Obligation, the subjective Moral Intuition could not possibly exist; for the Intuition is simply the reflection of the Obligation in consciousness. On the other hand, without the subjective Moral Intuition, the objective Moral Obligation could not possibly be known; for the knowledge of every objective fact unplies neceswithout the subjective moral intuition, the objective Moral Obligation could not possibly be known; for the knowledge of every objective fact implies necessarily the existence of an appropriate faculty for knowing it.

knowing it.

It is plain, therefore, that, since all moral relations are social relations of a special kind among moral beings, Scientific Ethics recognizes morality as inseparable from the fact of society, objective and necessary by the very Nature of Things; and unless at least two moral beings coëxisted under mutual relations, morality would be impossible. It is equally plain that Moral Obligation is also the necessary condition under which all moral beings enter into mutual relations; that there is nothing contingent about it; and that it could not be known, were there not a subjective faculty of Moral Intuition corresponding to the objective fact of Moral Obligation. To express it differently, Moral Obligation is the absolute condition of all society among moral beings; and Moral Intuition is the absolute condition of slipation.

tion of all society among moral beings; and Moral Intuition is the absolute condition of all knowledge of Moral Obligation.

At the same time, Moral Obligation does not depend for its objective existence on Moral Intuition. It exists objectively, whether known or not, provided that moral beings exist. The moral intuitions are of all degrees of clearness and strength, like the mathematical intuitions. This fact explains the varying moral judgments of different ages, climes, and conditions of men. Although no moral intuition can be prior, in point of time, to actually existing moral relations, and although every moral relation, so far as discerned at all, is discerned in the very first instance to be objective and necessary, it very frequently happens that moral relations are imperfectly known. In this as in other things,—for instance, in mathematics,—the knowledge of actual relations grows from less to more; but the increasing knowledge is simply the discovery of objective facts previously unperceived. Whoever reflects upon this subject long enough will see in this a complete explanation of the moral development of man. But he will also see in it the reason why the moral judgments of mankind become more and more alike in proportion as they become civilized.

B. Moral Sentiment.

B. Moral Sentiment.

B. Moral Sentiment.

Moral Sentiment depends for its development upon the development of Moral Intuition. It is a result rather than a cause of it, in accordance with the general law that, however disguised in their connection, the feelings adapt themselves to the perceptions in the long run, though feelings already developed usually advance or retard for a while the further development of the perceptions. There could be no consciousness or feeling of Moral Obligation, unless Moral Intuition had first taken cognizance of it. Moral relations may exist without being perceived; yet, when perceived, they awaken moral emotions. There is no nobler sentiment, and in all fine natures no stronger sentiment, than the sentiment of Duty,—the sublime consciousness of the Ought. The words Duty and Debt are etymologically the same, both being derived from the Latin debeo, "I owe," debeo is de-habpo, "I have from" another, and therefore "I owe back" to him. Both Duty and Debt, therefore, express a social relation,—a relation of mutual moral obligation; for my debt to another is the duty I owe him, and my duty is the debt which he may justly claim from me as his right. So also the word Ought is the preterite tense of the verb ove; "I ought" was originally "I owed," as in the old version of the gospel by Tyndale—"There was a certain lender which ought him five hundred pence," that is, owed him. These facts show that the consciousness of Duty, of Debt, of the Ought, is fundamentally one and the same, as the feeling or sentiment which supervenes upon the recognition of the social, i. e. moral, relation one holds to another moral being. It is not enough, with Mr. Darwin, to rank the sentiment of the Ought as "merely a persistent instinct" [p. 88]; this instinct must be explained, and it can find no adequate explanation except in the facts that an objective moral obligation is perceived by a subjective moral intuition, and that this perception acta upon the emotional nature to call forth the feeling of an existing obligation. No one

duty or debt to others, are many allied sentiments which I cannot now stop to consider, yet which are of the greatest consequence, theoretically as well as practically. Such are the sentiments of approval or disapproval, which attach themselves to certain acts quite irrespective of the actor; the sentiments of self-respect and of remorse, which concern ourselves as actors; of admiration and indignation, which concern others as actors; and so forth. I can only call attention to the fact that all these various sentiments come into play as a result of Moral Intuition, whether it is clear or obscure, enlightened or mistaken; and that it is impossible, consequently, to build up any true science of morals on the merely derivative fact of feeling.

C. Moral Power.

C. Moral Power.

Moral Power depends for its development upon the antecedent development both of Moral Intuition and Moral Sentiment. The objective moral or social relations must first be perceived and felt, before the duties and rights mutually existing among moral beings can be consummated in moral action. The true connection of Moral Power with Moral Intuition and Sentiment cannot be discussed without going into the interminable controversy touching freedom and fate; but I will spare you as well as myself from such an infliction, and pass on,—simply stating that the three elements into which conscience has been analyzed,—Intuition, Sentiment, Power,—exist in varying proportions in different individuals, and consequently give rise to all the boundless diversity of moral character which surrounds us.

2. Primary Laws of Scientific Ethics.

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Scientific Ethics has thus been shown to be grounded on the universal Nature of Things, so far as objective Moral Obligation is concerned; and on the Nature of Man, so far as subjective Moral Intuition is concerned. It treats of the moral relations existing among moral beings, which are all, in the last analysis, of a social character; and its practical task, therefore, is the Determination of Rights and Duties in a State of Society among Moral Beings. All rights may be considered also as duties, and all duties also as rights; but the distinction between them is necessary, on account of the fact that each individual, singly and definite relations to all other individuals, singly and definite relations to all other individuals, singly and collectively. All primary rights are individual, as against other individuals; all primary duties are social, as towards other individuals.

A. Primary Rights.

The primary rights of the individual are three: the right to Existence, under the necessary conditions of society; the right to Freedom, or to be uninterfered with, except so far as the necessary conditions of society require interference; and the right to Development, or to have whatever is essential to the completion of individuality, under the same conditions.

B. Primary Duties.

B. Primary Duties.

The primary duties are also three, being merely the primary rights of the individual differently viewed: the duty of respecting the lives of all other individuals, the duty of protecting the freedom of all other individuals, and the duty of promoting the development of all other individuals.

When Jesus laid down the Golden Rule as—'Do unto others as ye would that others should do unto you,'' he stated substantially the above doctrine of rights and duties, as laid down by Scientific Ethics. But he referred the determination of rights and duties to the mere wish, or preference, or liking, of the individual, which is a very uncertain criterion: "Do unto others as ye would likat is, as ye would likel that others should do unto you." The scientific translation of the Golden Rule into the doctrine of Primary Rights and Duties supplies the lack of a definite objective principle, or idea; which is an important ethical advance.

The limitations of rights and the modifications of

portant etnical advance.

The limitations of rights and the modifications of duties, consequent upon the various complications of social relationships, cannot here be dwelt upon, but would form a very important portion of a fuller treat-ment of the subject.

3. Ultimate Objects of Scientific Ethics.

The ultimate objects or ideal aims proposed by Scientific Ethics are, first, the moral perfection of the individual by the highest possible culture of his moral nature, and, secondly, the moral perfection of society by the completest possible fulfilment of all rights and duties in an actual social state.

4. Fundamental Motives of Scientific Ethics.

The fundamental motives appealed to and fostered by Scientific Ethics are: first, reverence for the uniby Scientific Ethics are: first, reverence for the universal Nature of Things, as the ultimate ground of all moral obligation; secondly, reverence for Human Nature, as the subjective reflection of the Nature of Things; and, thirdly, reverence for the Social Humanity which ought to be the objective reflection of it. To phrase it a little differently, the supreme motives of Scientific Ethics are the Love of Truth, the Love of Virtue, the Love of Man.

III. MOBAL OBLIGATION AND MORAL INTUITION: SCIENTIFIC ETHICS AS GROUNDED ON THEIR SYN-THESIS IN THE MORAL HISTORY OF MANKIND.

1. Moral Obligation a Part of the Environment.

1. Moral Obligation a Part of the Environment.

Moral Obligation is, as I have tried to show, the supreme fact in the Nature of Things; that is, the potential moral relations which necessarily come into actual existence, whenever noral beings are brought into a state of society, constitute the highest order of relationships known to us. Being objective and universal, they form a part, and in a high sense the most important part, of that universal Environment, which pours its constant, all-surrounding, and all-permeating influences upon slowly developing man. It is impossible to explain the fact that man has at

last become a moral being, though evidently having had his origin in lower races devoid of all recognizable moral characteristics, without perceiving that, all things considered together, the action of the environment on him has been, on the whole, a moral one. This fact that the total influence of the universe on man has been to render him a moral being is of itself a sufficient proof that Moral Obligation is an objective fact of the Nature of Things, and has therefore impressed itself on man as a fact of his subjectivity. The whole tendency of modern science is to explain the facts of human development and experience by the iterated and reiterated impressions made on his plastic organization by the never-ceasing action of the environment; and I do but faithfully carry out the same line of thought by referring his moral development to the same cause. Unless Moral Obligation were part and parcel of the Nature of Things which has from his very origin been constantly impressing itself upon him, the fact that he is to-day a moral being, with moral obligations resulting necessarily from his social relations, would be an absolutely hopeless anomaly. hopeless anomaly.

2. Moral Intuition the Reaction of Man to the Action of the Moral Environment.

of the Moral Environment.

Moral Intuition is, as I have also tried to show, the supreme fact of man's subjectivity. It must be regarded as a faculty developed in him by the constant action of the Moral Environment, that is, the sumtotal of all the moral relations involved by the aboriginal necessity of things in the gradual evolution of human society. Although it seems impossible to account for the slow concentration or focalization of moral intelligence in man on any other hypothesis than that of a circumambient infinity of moral intelligence identical with the universal Energy whence his whole being is ultimately derived, it is nevertheless true that the process of evolution by which this concentration is effected must be a constant action and reaction between the Environment and the Orconcentration is effected must be a constant action and reaction between the Environment and the Organism. When the influence of necessary Moral Obligation, as an objective and universal reality acting incessantly on man's cognitive capacity, is taken into thou htful consideration, it appears almost impossible to resist the conclusion that a faculty of Moral Intuition must be developed in him at last, in the same manner as the faculty of Mathematical Intuition has been developed. Each new perception of a moral relation adds to his stock of moral knowledge, and at the same time strengthens by exercise the perceptive faculty by which it has been acquired; the discovery of other moral relations previously unsuspected will follow as a natural consequence of this increase of perceptive or intuitive power. In this way it may be seen how the faculty of Moral Intuition itself is the result of the perpetual action on Man of his Moral Environment and his reaction to it.

3. The Natural History of Conscience.

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By this unending action and reaction between man and his environment, the moral evolution of mankind can alone be explained. It supplies the data for the Natural History of Conscience, regarded as a thoroughly scientific tracing of the various steps by which the race has ascended from bestiality to a true humanity. Subsidiary to the evolution of Moral Intuition, yet accelerating it in various ways, the evolution of Moral Sentiment and Moral Power will be simultaneously explained. The consolidation of these elements into habit, the conversion of habit into what might be termed reflex moral action, and the shintianeously explained. The conversion dath into what might be termed reflex moral action, and the transmission of reflex moral action as hereditary moral instinct, together with such moral phenomena as may properly be classed with the general facts covered by the laws of variation and natural selection, all showing how man has slowly risen to a larger moral life, will go to make up a Natural History of Conscience, which must indubitably constitute an essential part of Scientific Ethics. Little by little has moral knowledge been acquired, mixed as it still is with ignorance, errors, and blunders of all kinds; little by little has this knowledge developed moral sentiment and moral power, and become incorporated into human character, life, and society. But nevertheless evolution is a fact, and still continues; and it will soon be recognized, independently of all supposed supernaturalism, as the true explanation of the moral experience of mankind.

SUMMARY.

I have now sketched in the most condensed manner, almost with the baldness and dryness of a mere. "Table of Contents." an outline of Scientific Ethics, under three general divisions. The first division shows that Moral Obligation is an objective reality, as part of the eternal and immutable Nature of Things on which Scientific Ethics are grounded; that all science is concerned with the objective and universal alone, and that Ethics, as the science of sociomoral relations, meet this requisition; and it also shows what the Nature of Things is. The second division shows that Moral Intuition is a subjective reality, corresponding to Moral Obligation as its necvision shows that Moral Intuition is a subjective reality, corresponding to Moral Obligation as its necessary, subjective correlate; that conscience is a complex faculty, consisting of the triple elements of intuition, sentiment, and power; that all rights are duties, and all duties rights; that the three primary rights of man are life, liberty, and development, and that his three primary duties correspond; that the ultimate objects of Scientific Ethics are the moral perfection of the individual and of society; and that its fundamental motives are love of truth, love of virtue, and love of man. The third division shows that Moral Obligation and Moral Intuition, combined as endless action and reaction between the mind and the Nature of Things, give the clew to the Moral History of Man, which is explained only by the law of evolution; that his moral sense is not a phenomenon of purely subjective origin, but has been developed out of the dim perceptions of pre-human races by a slow

cess of experience, consisting in the first place of process of experience, consisting in the first place of impressions made upon the blank capacity of intuition by objective moral relations, and in the second place of vital reactions by which these impressions appeared in consciousness as actual intuitions,—pre-

appeared in consciousness as actual intuitions,—precisely as impressions made on the senses appear in consciousness as sensations.

It must be added, however, that, while the mind obiginates no intuition except as it is directly affected by the truth of things, which is independent of it, yet the mere presence of the truth of things could no more create the capacity of intuition than the capacity of intuition could create the truth of things,—that it takes the correlation and constant interaction of the two, accepted as given facts, to explain moral phenomena. To go behind these facts, as such, Scientific Ethics must become Scientific Philosophy.

BRLATION OF DARWIN'S THEORY TO SCIENTIFIC ETHICS.

Mr. Darwin's theory of conscience as a highly complex faculty developed out of the social instincts, and manifesting itself increasingly in proportion to the social advancement of the race, will be seen at once to belong as an essential part, with some modificacations, to Scientific Ethics. It finds morals substantially in social relations alone; it acknowledges the necessity of the development of the "intellectual powers" before conscience can be developed out of the social instincts, and thereby (though unconsciously) prepares the way for admitting that the intellectual perception of social relations—that is, moral instincts can give rise to the moral sense; and by placing the "test of morality" in the "general good of the community," it begins to transfer the basis of Ethics from the subjective to the objective, though this transference is not complete till the Nature of Things is recognized as the ultimate basis. But the most striking merit of Mr. Darwin's theory appears in the fact that it is the first truly scientific attempt to explain conscience "from the side of natural history," and this fact will make the entire third division of Scientific Ethics merely an expansion of history, with a few necessary modifications. The exceeding ingenuity of his treatment of the subject, and the great insight he displays into the evolution of what thave called Moral Sentiment as distinguished from Moral Intuition, will render the required modifications rather an addition than a correction to his theory. For instance, his illustration of the bees throws great light on such a case as that of the ancient Spartans, Moral Intuition, will render the required modifications rather an addition than a correction to his theory. For instance, his illustration of the bees throws great light on such a case as that of the ancient Spartans, who are said to have come to regard theft as a virtue in consequence of their peculiar social necessities; while it will be necessary to concede the objective immorality of the conception. The order of exposition in any science being the reverse of that of its development, Mr. Darwin has naturally begun with the third rather than with the first division of Scienlific Ethics; but the great excellence of his work will be fully appreciated only by one who takes in the science of morals as a whole. Henceforth it will be impossible to teach Ethics in any scientific way without due acknowledgment of his genius; and one must smile when Miss Cobbe, in her beautiful essay on "Darwinism in Morals," is led to exclaim: "Let me say it at once. These doctrines appear to me simply the most dangerous which have ever been set forth since the days of Mandeville." Her fears are groundless; Truth is ever the dearest friend of Virtue.

THE TWO GREAT SCHOOLS OF MORALS.

THE TWO GREAT SCHOOLS OF MORALS.

Under various names, there have been two great schools of moral philosophy ever since the beginning of human thought. The one, called in most recent phraseology the experiential, utilitarian, or derivative school, refers all moral judgments to experiences of utility, regards them as all generalized from observations of the different effects of different actions upon human happiness, and reduces moral obligation in the last analysis to the purely subjective principle of the "inseparable association" of ideas which have been acquired or inherited. The other, called usually the intuitional or sentimental school, refers all moral judgments to à priori principles of intelligence, independent of all experience of objective realities, and thus reduces all moral obligation in the last analysis to the purely subjective principle of an inexplicable "constitution of the human mind." To the former school belongs John Stuart Mill; and Herbert Spencer gives in his adhesion to it in the following words: "I believe that the experiences of utility, organized and consolidated through all past generations of the human race, have been producing corresponding modifications, which, by continued transmission and accumulation, have become in us certain faculties of moral intuition—certain emotions responding to right and wrong conduct, which have an apparent basis in the individual experiences of utility." [Quoted by Mr. Darwin and Miss Cobbe,] Spencer here seemingly recognizes moral intuitions, yet reduces them to mere emotions, which are subjective affections and not objective perceptions. To the other or intuitional school belong Miss Cobbe and Mr. Lecky: the former maintaining that moral intuitions are "utilitimate ôata of our mental constitution, ideas obtained by the à priori action of the normally developed mind" [Darwinism in Morals, and Other Essays, p. 16]; and the latter maintaining that "by the constitution of our nature the notion of right carries with it a feeling of obligation

SCIENTIFIC ETHICS INCLUDE BOTH SCHOOLS.

The bane of both these schools is their excessive subjectivity, which renders them equally unscientific. Science deals with the objective and universal alone: and neither the principle of the association of ideas

nor that of a priori intuition can attain it. The question recurs: what causes the "inseparable association" of certain ideas, and not of others—what accounts for the necessary character of any intuition whatever? The only possible answer is: the action of the environment, reflecting its necessary relations in human intelligence. Scientific Ethics abut on the necessity of things, whence result the necessities of thought,—conceding to the experiential school that all knowledge comes by experience, and to the intuitional school that moral intuition is a fact. But Scientific Ethics show on the one hand that experience covers all human contact with the objective, and therefore includes moral intuition as well as physical sensation; and show on the other hand that moral intuition is not an à priori principle, but an objective perception. Experientialism can render no reason why any one ought to aim at his own happiness, or the "greatest happiness of the greatest number;" intuitionalism can render no reason why a merely subjective principle should possess any objective or universal validity. At this decisive point Scientific Ethics step in to disclose the objective character of Moral Obligation as a part of the Nature of Things, and the immediate contact of the mind with Moral Relations by means of Moral Intuitions as a part of human experience. While both of the recognized schools rest moral obligation on a ruinous subjectivity, Scientific Ethics rest it on a real and absolute objectivity, and thus secures the universality without which science can find no foundation anywhere. In Scientific Ethics, therefore, uniting objective Moral Obligation with subjective Moral Intuition in the Moral History of Man, which it explains by the law of evolution with subjective Moral Intuition and reaction of the environment and the human mind, Morality for the first time takes its proper place among the natural sciences.

THE FUTURE OF SCIENTIFIC ETHICS.

Unheralded, unsuspected, this sublimest of all sciences has become the ideal foundation of a mighty nation. When the Declaration of Independence laid the corner-stone of this great republic in "certain inalienable rights, among which are life, liberty, and the pursuit of happiness," what was it but the dedication of a continent to the Primary Rights of Man, in all their objective reality and boundless universality? Yet that grand dedication involved the whole of Scientific Ethics. Here in this Western world a vast society has been erected on the basis of ideas deep as the foundations of the universe, secular and yet sacred, certain to become the indestructible groundwork of the dawning religion of the world. Imperfect as this society still is, it is destined to become the living illustration to all mankind that the hope of all hearts is no idle dream, but the beginning of a visible heaven; and that the magnificent Science of Ethics is yet to give birth to the still more magnificent Art by which the name Humanity shall be made the synonyme of Truth, Virtue, and Love.

The discussion of "Darwinism" by the Philosophical Section of the Evangelical Alliance, if not brilliant, is in some respects satisfactory. It shows that the divines are beginning to perceive what they ought to decry, and what not. When President McCosh declares "it is useless [he might have said foolish] to tell the younger naturalists that there is no truth in the doctrine of development, for they know that there is truth, which is not to be set aside by denunciation;" when he intimates that religion may have neither title nor interest to insist that species have not developed from other species, in an advance from age to age, from lower to higher forms—and by his silence leads us to infer the same of science; and when again such a champion of Orthodoxy as Dr. Hodge, of Princeton, pertinently affirms that "the great question which divides theists from atheists, Christians from unbelievers, is this: Is development an intellectual process guided by God, or is it a blind process of unintelligible, unconscious force, which knows no end and adopts no means?" we may safely conclude that the time draws nigh when scientific hypotheses of the origin of species will be left to stand or fall upon their own merit-, or at least be denounced with discrimination and some regard for the consequences. Dr. Hodge got his answer from a divine of his own denomination, who is also a botanist, a Rev. or fall upon their own merits, or at least be denounced with discrimination and some regard for the consequences. Dr. Hodge got his answer from a divine of his own denomination, who is also a botanist, a Rev. Dr. Brown, grandson of the doughty John Brown of Haddington—whose praise is in all the Calvinistic churches. He informed the audience that he unhesitatingly accepted the theory of development as a working hypothesis, and succinctly gave the reasons for doing so; and that he none the less held "the views advanced in the Shorter Catechism issued by the Westminster Assembly of Divines," enumerating the thirteen principal points in succession, adding that, while he did not hold "that God created all things out of nothing in the space of six days," the development doctrine was not responsible for the abandonment of that dogma. Finally, he ventured to anticipate "that the confirmation or general adoption of the hypothesis of development will ultimately exercise a beneficial influence on religion." The only note of a contrary tenor, so far as the daily report shows, was from Dr. Dawson, who appears still to hold that the Darwinian theory logically leads to atheism; that, "as regards varieties, Darwin is well enough; but, as regards species, I don't believe in it, because it comes in contact with the Bible." He has to draw the line somewhere, so he draws it at species. As to natural selection, "it is not science at all—only a bad philosophy." This is said of what an older naturalist (as quoted in another article, in which we have already referred to Dr. Dawson's view) declares to be neither a theory nor an hypothesis, but the expression of a necessary fact,—Nation.

Hoetry.

MAKE THE BEST OF LIFE.

What's the use of always fretting Over ills that can't be cured? What's the use of finding fault with What we know must be endured?

Does it make life's burdens lighter If we grumble 'neath their load? Does it make life's pathway smoother If we fret about the road?

Better use our time than fill it Full of sighs and vain regrets
Over some imagined blunder,
As does he who always frets.

Storms will follow every sunshine, Grief be mixed with every joy; And 'tis best that it should be so: Gold's too soft without alloy.

"Half our trouble's our invention. We're to blame for half our strife; Then if life is what we make it, Why not make the best of life?

The British Workman.

NEW SUBSCRIPTIONS TO INDEX STOCK.

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A. W. Leggett, Detroit, Mich. "100 B. F. Dyer, James Purinton, Lynn, Mass. "100 F. A. Nichols, Lowell, Mass. "100 J. S. Palmer, Portland, Me. "100 Mrs. A. L. Richmond, Brooklyn, N.Y. "100 Mrs. A. L. Richmond, Lowell, Mass. "100 Mrs. A. L. Richmond, Brooklyn, N.Y. "100 Mrs. A. Benj. Ireson, Lynn, Mass. "100 J. E. Oliver, Lynn, Mass. "100 J. E. Oliver, Lowell, Mass. "100 Mrs. E. B. Chase, Providence, R.I. "100 Mrs. E. B. Chase, Providence, R.I. "100 Mrs. E. B. Chase, Valley Falls, R.I. "100 L. F. Garvin, Jonedale, R.I. "100 James Damon, Ipswich, Mass. "100 Joseph A. Barker, Providence, R.I. "100	W. C. Russel.	Ithous N. W.			
B. F. Dyer, Jones Purinton, Jonesph A. Barker, Providence, R.I. Walley F. Al. Boston, Mass. " 100 James Purinton, Lynn, Mass. " 100 James Purinton, Brooklyn, N.Y. " 100 James Denis James	A W Laggett	Tuisen, N. Y.			
James Purinton, Lynn, Mass. " 100 F. A. Nichols, Lowell, Mass. " 100 J. S. Palmer, Portland, Me. " 100 Brooklyn, N.Y. " 100 Brooklyn, N.Y. " 100 Lowell, Mass. " 100 Brooklyn, N.Y. " 100 Lowell, Mass. " 100	R F Dror	Detroit, Mich.			100
F. A. Nichols, Lowell, Mass. "100 J. S. Palmer, Portland, Me. "100 Robt. Ormiston, Brooklyn, N.Y. "100 Mrs. A. L. Richmond, Lowell, Mass. "100 Mrs. Benj. Ireson, Lynn, Mass. "100 J. E. Oliver, Lynn, Mass. "100 L. Haca, N.Y. "100 L. H. Aldrich, Providence, R.I. "100 Geo. L. Clark, Providence, R.I. "100 Mrs. E. B. Chase, Valley Falls, R.I. "100 L. F. Garvin, Lonsdale, R.I. "100 James Damon, Lonsdale, R.I. "100 Joseph A. Barker, Providence, R.I. "100 Joseph A. Barker, Providence, R.I. "100 Joseph A. Barker, Providence, R.I. "100	Inmou Dawleton				100
J. S. Palmer, Portland, Me. 100 Robt. Ormiston, Brooklyn, N.Y. 100 Mrs. A. L. Richmond, Lowell, Mass. 100 Mrs. Benj. Ireson, Lynn, Mass. 100 J. E. Oliver, Lynn, Mass. 100 J. E. Oliver, Lowell, Mass. 100 J. E. Oliver, 100 J. E. O	F A Nichele	Lynn, Mass.		••	100
Rob. Corniston, Fortland, Me. 100	F. A. Michols,	Lowell, Mass.		"	100
Mrs. A. L. Richmond, Mrs. A. L. Richmond, Lowell, Mass. " 100 Mrs. Benj. Ireson, Lowell, Mass. " 100 J. E. Oliver, Lynn, Mass. " 100 Ithaca, N.Y. " 100 Geo. L. Clark, Providence, R.I. " 100 Mrs. E. B. Chase, Providence, R.I. Two 200 Mrs. E. B. Chase, Valley Falls, R.I. " 100 L. F. Garvin, Londale, R.I. " 100 James Damon, Ipswich, Mass. " 100 Joseph A. Barker, Providence, R.I. " 100	J. S. Falmer,	Portland, Me.		66	
Mrs. Benj. Ireson, Lowell, Mass. " 100 Mrs. Benj. Ireson, Lynn, Mass. " 100 Lynn, Mass. " 100 Lynn, Mass. " 100 Lynn, Mass. " 100 Mrs. Benj. Ireson, Providence, R.I. " 100 Mrs. Benj. Ireson, Providence, R.I. " 100 Mrs. Benj. Ireson, Ireso	Root. Ormiston,	Brooklyn, N.Y.	66	66	
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S. E. Oliver, Ithaca, N.Y.	Mrs. Benj. Ireson,	Lynn, Mass.	**	64	
Cark Providence R.I. 100	J. E. Oliver,	Ithaca, N.Y.	**	66	
Geo. L. Clark, Providence, R.I. "100 W. M. Jackson, Providence, R.I. Two "200 Mrs. E. B. Chase, Valley Falls, R.I. "100 L. F. Garvin, Lonsdale, R.I. One "100 James Damon, Joseph A. Barker, Providence, R.I. "100 100 100	E. H. Aldrich,	Providence, R.I.	66	**	
W. M. Jackson, Providence, R.I. Two 2006 Mrs. E. B. Chase, Valley Falls, R.I. 4 100 L. F. Garvin, Lonsdale, R.I. One 100 Joseph A. Barker, Frovidence, R.I. 4 100 100 100 100	Geo. L. Clark,	Providence, R.I.	**	66	
Mrs. E. B. Chase, Valley Falls, R.I. " 100 L. F. Garvin, Lonsdale, R.I. One " 100 James Damon, Joseph A. Barker, Providence, R.I. " 100	W. M. Jackson,	Providence, R.I.	Two	**	
L. F. Garvin, Lonsdale, R.I. One description of the control of the	Mrs. E. B. Chase,	Valley Falls, R.I.	-44	**	
James Damon, Ipswich, Mass. " 100 Joseph A. Barker, Providence, R.I. " 100	L. F. Garvin,	Lonsdale, R.I.	One	"	
Joseph A. Barker, Providence, R.I. " " 100	James Damon.	Inswich, Mass			
100		Providence R I			
					100

CASH RECEIPTS.

FOR THE WEEK ENDING MARCH 7.

FOR THE WEER ENDING MARCH 7.

E. Dunham, \$1; C. A. Gurley, \$1; Juo. Alexander, \$1; Franklin King, \$2; Henry Powers, \$1 50; John M. Remsey, \$3; Thos. M. Day, \$3; Mrs. Isanc Green, \$3; Fred J. Davis, \$2; K. L. Green, \$3; Lizzie R. Brown, \$3; S. W. Rathbone, \$3; Joseph Dow, \$3; Moses Milkman, \$3; Jas. E. Luther, \$3; Joseph Dow, \$3; Mose Milkman, \$3; Jas. E. Luther, \$3; Joseph Dow, \$3; W. A. Clark, \$3; Jas. E. Luther, \$4; Jacob Taber, \$3; W. A. Clark, \$3; J. H. Foster, \$1; Matthew Anderson, \$3; Mrs. Alfred Rice, \$2; E. Dillon, \$11.26; Jose. A. Stevens, \$2; H. L. Hollaway, \$3; J. T. Thornton, \$5; S. M. Clute, \$1; W. T. Newton, \$3; J. G. Paint, \$3; Marion Kent, \$3; J. R. Burt, \$3; A. M. Knapp, \$3; John Branham, \$1; White & Bauer, \$1; L. J. Doyle, \$3; Thos. Pierce, \$3; Wm. F. Channing, \$3; Alex. Grant, \$3; J. M. Barker, \$1; Wm. A. Abbot, \$3; C. H. Brown, \$3; J. W. Scott, \$1.06; Jerome Bass, \$1; F. Hinckley, \$4.2n; Louis Knorr, \$4; B. B. Griswold, \$3; warren Griswold, \$1; Levi Knelley, \$1; R. G. Fell, \$1; G. H. Foster, \$2.40; F. Constantine, 20 cents; Wm. Berriam, 10 cents; Henry Lantz, 10 cents; Horace Bowditch, \$1; A. Miller, 78 cents; P. M. Whistler, 76 cents; S. Southworth, 25 cents; J. D. Zimmerman, \$2; Edwin Dews, 15 cents; W. L. McKinney, 25 cents; W. T. Harris, 10 cents; Mary W. Wellman, 10 cents; R. Willin, \$1; Morris Altman, 50 cents; C. D. B. Mills, \$10; Jacob Sprinkle, \$10; E. B. Wolcott, \$10; W. N. Clark, \$10; J. G. Berry, \$1.-60, James Damon, \$10; E. W. Meddaugh, \$100; Alex. Coehran, 30 cents.

All receipts of cash will be acknowledged as above, and no other receipt sent unless specially requested. Persons who do not see their remittances acknowledged within three weeks after sending, will please notify us.

N. B.—Please examine the ADDRESS and DATE on your INDEX mail-tag, and report at once any error in either.

N. B.—When writing about a former remittance, always give the date of such remittance as exactly as possible.

RECEIVED.

Rooks.

Books.

New RESEARCHES ON ANCIENT HISTORY: Embracing an Examination of the History of the Jews until the Captivity of Babylon; and Showing the Origin of the Mosale Legends concerning the Creation, the Fall of Man, the Flood, and the Confusion of Languages. By C. F. Vol ney, Count and Peer of France, Author of "The Ruins or Meditations on the Revolutions of Empires" etc. Boston: Published by J. P. Mendum, at the office of the Boston Investigator. 1874.

ton: Published by J. P. Mendum, at the office of the Boston Investigator. 1874.

Pamphlets and Periodicals.

A Lancashire Rector on Church Cursing and Disestablishment. A Speech by the Rev. T. P. Kirkman [London.]

CRUELTY AND CHRISTIANITY. A Lecture by Allen D. Graham, Esq., at Freemason's Hall, London, Nov. 9, 1873 London: Thomas Scott. 1874.

The Impossibility of Knowing What is Christianity by the Rev. Peter Dean. London: Thomas Scott. 1874.

PLEAS FOR FREE INQUIRY. Part III. A Few Words on "Inspiration." By M. A. London: Thomas Scott. 1874.

Letter and Authentic Documentary Evidence in relation to the Trinity Church Property, in the City of New York, submitted to the Commissioners of the Land Office by Rutger B. Miller, June 21, 1885. Albany: 1835.

Thinty-Seventh Annual Meeting of the Corporation of the Warren Street Chapel. Proceedings and Report. Boston: A. Mudge & Son. 1874.

On Charity, as a Scientific Principle in Political Economy. A Lecture delivered before the Academy of Sciences, New Orleans. By Hon. T. Whatron Coilens.

The Unitarian Review and Religious Magazine. The Enn Monthly. March, 1874. Philadelphia: 506 Walnut Street.

The Sanntabian. March, 1874. New York: A. S. Barnes & Co.

THE SANITARIAN. March, 1874. New York: A. S. Barnes

CO. THE HERALD OF HEALTH. March, 1874. New York: Wood & Holbrook.