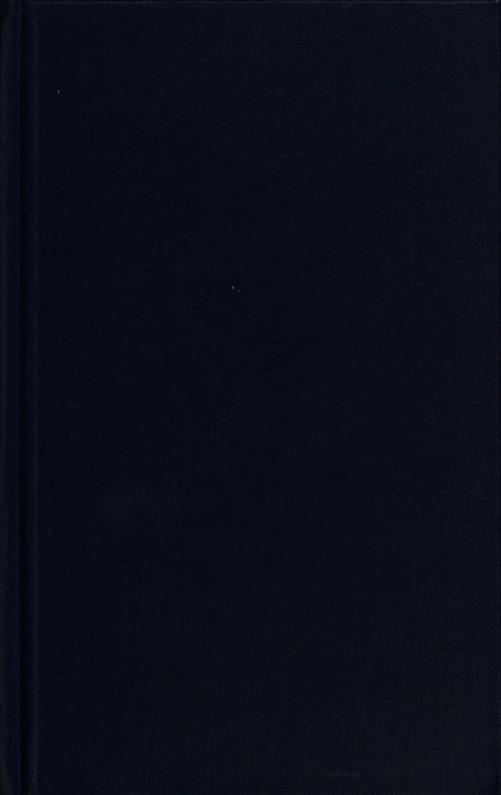
This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.



https://books.google.com





行ったいこう

THE FIRST MAN

AND

HIS PLACE IN CREATION

BY THE SAME AUTHOR.

The POWER of the SOUL OVER the BODY. Fifth Edition, price 6s.

'It shows that through the intimate connexion between the mind and body, the former must at all times, and to an extent inconceivable by the thoughtless, influence the latter; and that unless this inward principle be disciplined, purified, enlightened, vainly must we look for the harmony between the two, so necessary for human enjoyment. We would say read the book, and judge for yourself.'

'We step a little out of our way to express our approbation of this volume.'

CHURCHMAN'S MONTHLY REVIEW.

'Such a book must be of signal service, and deserves a hearty welcome from all who have at heart the advancement of the moral and physical welfare of the world.

The Critro.

MAN and HIS MOTIVES. Third Edition, price 6s.

HEALTH, DISEASE, and REMEDY. Price 7s. 6d.

The PATHOLOGY, CAUSES, and TREATMENT of PUERPERAL FEVER. The Treatise for which the Fothergillian Gold Medal was conferred on the Author by the Medical Society of London. Price 6s.

'The most sagacious and enlarged analysis of this very difficult subject with which I am acquainted.' R. FERGUSON, M.D., Physician-Accoucheur to the Queen.

The USE of the BODY in RELATION to the MIND. Third Edition, price 6s.

' Highly interesting and valuable.'

THE ATLAS.

'Having a strong practical bearing on health, happiness, and religion.'
BRITISH QUARTERLY.

THE FIRST MAN AND HIS PLACE IN CREATION

CONSIDERED ON THE PRINCIPLES OF SCIENCE AND COMMON SENSE

FROM A CHRISTIAN POINT OF VIEW .

WITH AN APPENDIX ON THE NEGRO

RY

GEORGE MOORE, M.D.

Member of the Royal College of Physicians of London &c.

LONDON
LONGMANS, GREEN, AND CO.
1866

LONDON PRINTED BY SPOTTISWOODE AND CO. NEW-STREET SQUARE



PREFATORY REMARKS.

'THE first man and his place in creation! Poh!' says our positive friend. 'Why look back to the beginning and not be content to see what we can see-man as he is just before us? If you desire a poetical subject, do not choose the first man, nor the last—they are already disposed of; but propound to us your philosophy of man as a commercial animal, or how any of us can improve our capital with the least loss of credit, and time; then we will learn at your feet till we get the whole lesson by heart. But as to the first man, what need we know about him? We have had enough of han and more had better not be written; it must be either the old story over again, or else the invention of a new and therefore a false one,-in either case, as Mahomet said of the old world library, useless. If you mean Adam, we are told in plain terms who he was, why he was, where he was, and what came of him. For my part I have done with him, and now only wish to find the best place for myself.'

Very well, you believe the old story; remain undisturbed in the repose of your faith then, O happy

man without doubt! But, as rational belief implies reasons for believing, you would be but consistent in sympathising with others, who, in lack of your faith, may be in want of your reasons, or such, perhaps, as this book is intended in a measure to furnish. There will be no invention in it, and but small speculation. It will probably be easier to read than to write, and what is not plain to the understanding in one place may become so in another, the chapters being contrived with a view to avoid the tedious formality of laboured and systematic argumentation. By thus distributing the matter in a manner and with a plan to admit of a few repetitions of thought and expression in new connection, some points of importance may be the better elucidated and enforced.

As the faces of our friends would be more pleasing in a homely light than in the intense glare of the pure electric flame, so the aspect of an argument often appears more clearly in familiar than in refined language. The dry light of mere logic is often more brilliant in appearance than useful in effect, and truth, like a gem, is usually seen best in the simplest setting.

Without the restraint of exact system, we prefer freely to reason on human nature in general, that we may the better conceive the character and position of the first man, not, however, without an eye to the demand of our positive friend, who wishes to find the best place for himself, a discovery not possible until he knows his own nature in respect to this life, as well as to some-

thing beyond his commercial interests, and the comforts of his position as a Sunday Christian, quite at home in this world all the days of the week. If we learn that the right place for any man is the best he can find, and if we discover in the midst of our disquisitions how best to attain that desirable end, any amount of labour involved in our enquiry will be counterbalanced by its interest; reader and writer will share in both the profit and the pleasure; the writer, indeed, having already a reward in the refreshment and the joy of writing, with such a good hope of being useful to the reader.

But is a book on this subject really wanted? Yes, certainly, if anybody is likely to become the least the better for it. Those who have formed their opinion on the subject, with faith or without, will probably be indifferent to this book, or despise it, or at least remain of the same opinion still. Others, to whom the matter is new, may be assisted to see their way to a wholesome decision; and since the origin of man will continue to be a theme more or less brought out to view in all the fast coming speculations, scientific or otherwise, perchance there may be 'a voice as unto him that hears,' from some thoughts in this volume, by which life's path may become less perilous and more profitable to the neophyte of science. But yet, does any one need to be instructed as to the first man? Yes, again undoubtedly, for we know too little either of him or ourselves, and the less of ourselves for thinking so little of him and his essential difference from any brute, and also from any man who hears not the voice of his Maker.

Most men believe there was a first man. Some men. however, strange to say, seem not to receive this as a necessary fact, and are unwilling, in consequence of their extreme impartiality, as philosophers, to credit the assertion that their ancestry terminates in a first human pair. Neither their own consciousness, nor the probability of such an origin, is sufficient to convince them that there must have been a first man and woman, created as such, who, as a reasonable matter of course, occupied their appropriate place in creation. Thinking that reason necessitated at least that amount of faith, we asked a friend 'Do you object to the title of this volume?' Alas! up started our contradictory friend, the poles of whose mind are both negative or repellent, and declared every word of the title an assumption of the most preposterous kind, 'For,' said he, 'where is the proof there ever was a first man, or even a creation in which he could have a place?' This friend is himself a curious fact, an evolutionist, or something of that sort, but consistent enough, since, according to his creed—and a very straggling, startling creed it is-what we call man is, at the best, only an odd extension of the physical qualities common to all animals, and may recur, in his offspring at least, to the place of anthropoid apes, and so on back to In short, as man, according to this primordials. notion, had no final cause or creation, and is not distinct from a brute, he cannot be said to have either beginning or end as a man; so, to speak of the first man and his place in creation is unscientific! Doubtless, on science of that scale it is easy to lose one's place and find no good. Mr. Huxley says that 'thoughtful men, once escaped from the blinding influences of traditional prejudice, will find in the lowly stock whence man has sprung the best evidence of the splendour of his capacities; and will discern in his long progress through the Past a reasonable ground of faith in his attainment of a nobler Future.'

The Past of man indicated in this quotation is, alas! lost in the unknown history of 'the lowly stock whence he sprung,' and how he can find 'the best evidence of the splendour of his capacities' where he never was and where there is no light, it would exhaust a long Future to show. 'The blinding influence of traditional prejudice' of which Professor Huxley complains is that which began with a belief in man's original nobility by creative patent; and possibly after all, the influence of a prejudice in favour of such a faith is not nearly so blinding as a prejudice in favour of that mere fancy which would seek enlightenment in a Past nowhere discovered and a Future nowhere foretold. If Nature does not inform us that man was created in direct correspondence with his Maker, neither does she show us how such beings as men could spring out of an anthropoid endeavour after higher qualities. Nature being silent on that point is also questioned in vain as to how it came to pass that apes having begotten men, these men not only invented a tradition of their immediate divine

^{*} Huxley's Man's Place in Nature, p. 111.

origin but that the best of their race were also found so unreasonable as to become prejudiced in favour of that tradition.

'The reasonable ground of faith in man's attainment of a nobler future,' on which Professor Huxley lays especial stress, is, however, of so restricted a character that men in general have but the smallest possible chance of ever getting a footing upon it, which, if it be a more reasonable ground of faith than Christianity affords us, would be a very great loss to those who cannot reach it, seeing that even Christian faith and hope are, to those who feel them, sources of elevated joy as well as strong stimulants to effort for the improvement of their own moral character and that of all whom they can influence. But this Huxleyan ground of faith exists only in the minds of a few natural philosophers whose knowledge of anatomy is sufficient to enable them to suspect the possibility that men as they are have attained their present position in virtue of a power imposed by nature upon apes of past ages to beget mankind with a capacity to go on improving without any known limit. It is evident that as this peculiar teaching of anatomy, together with a bias thus to interpret its teaching, is essential to the attainment of the said reasonable ground of faith there will be but few to find it, unless on very confused hearsay, thus affording small reason for faith of any kind concerning a man's own nobler Future.

But as we are told of the blinding influence of traditional prejudice, we are thereby warned against

being blinded by the influence of a prejudice which may be equally injurious without the advantage of any tradition in its favour. What, then, has induced Mr. Huxley to rely on his power so to understand the nature of limbs and brains as thereby to possess a reasonable ground of faith in his own attainment of a nobler Future? How does he discover 'the best evidences of the splendour of his capacity'? But as he does not and cannot mean his own nobler Future and his own splendour of capacity, whose does he mean? If he refer to a higher development of ape-nature in a race of men yet to come what is the present race the better for his private anatomical interpretations? We fear he has undertaken his researches and assumed his character of seer and prophet on the ground of a prejudice against Christianity, which has not only blinded him to the divine glory of its doctrines and the clearness of its evidences, but, what is worse, also deprived him of a faith and a hope very good to live and die on. and conducted him to a faith of no use to himself nor to any who may happen to believe him.

Mr. Darwin and Mr. Huxley are followed by M. Carl Vogt, a new and superior light on the matter of ape-nature and its proclivity to generate human beings. Equally high in science, more exact in the measurement of bones, and confident beyond measure in his own 'if,' 'but,' and 'perhaps,' Carl Vogt is most candid and profound in his expression of hatred to Christianity, as he understands it. In order to rebut the statement of Professor Rudiger Wagner that 'there is nothing

more certain, according to Darwin's theory, than the inference that both ape and man had for their single progenitor a form intermediate between ape and man," Carl Vogt proceeds to assert that the inference is solely Wagner's: 'As far as I know, no Darwinist has either raised that question or drawn the inference, for the simple reason that it neither accords with the facts nor their consequences.'† He then, in fear of being supposed capable of believing in a single origin of man, indicates that 'The ape-type does not culminate in one but in three athropoid apes which belong to at least different genera.' 'This much is certain,' he says, 'that each of these anthropoid apes has its peculiar character by which it approaches man: the chimpanzee, by the cranial and dental structure; the orang, by its cerebral structure; the gorilla, by the structure of its extremities.' The upshot of the argument is this: 'Let us imagine the three anthropoid apes continued to the human type-which they do not reach and perhaps never will reach; we shall see developed from the three parallel series of apes, three different primary races of mankind, two dolicho-cephalic races descended from the gorilla and chimpanzee, and one brachy-cephalic descended from the orang: that descended from the gorilla is, perhaps, distinguished by the development of the teeth and chest; that descended from the orang by the length of the arms and light-red hair; and that issued from the chimpanzee

^{*} Lectures on Man, by C. Vogt, p. 463.

[†] Still, as the translator of Vogt's work shows, Vogt is mistaken, since there are Darwinist advocates of unity.—*Ibid.*, p. 464.

by black colour, slender bones, and the less massive jaws.'* What a mixed breed of apes must have met from abroad to constitute Englishmen with such a variety of skull and complexion! He adds: 'If in the different regions of the globe anthropoid apes may issue from different stocks, we cannot see why these different stocks should be denied the further development into the human type, and that only one stock should possess this privilege; in short, we cannot see why American races of man may not be derived from American apes, negroes from African apes, or Negritos, perhaps, from Asiatic apes!'†

Anatomists and physiologists who can reason on facts, as well as observe them, have not yet in this manner attempted to account for the diversities of mankind; and, therefore, as Carl Vogt's argument is founded on imagination, with the aid of if and perhaps, these words, weak as they are, may be equally well employed to overthrow what is built on so slender a basis. While, however, we desire to give M. Vogt all honour for his patient labour as an anatomist, and for the candid boldness with which he teaches his pupils the mysteries of his miserable creed, we cannot but deplore the aptitude he evinces to misinterpret the facts of human history. and the utter repugnance he has so strenuously exhibited to any idea supposed to be of divine origin, except through development from apes. The blindness of prejudice against Christianity is too clearly the cause of his inability to see why men, who cannot

^{*} Ibid., p 465.

[†] *Ibid.*, p. 466.

but think of God, may not have had an origin without the intervention of chimpanzees, orangs, and gorillas, as the source of their limbs, brains, and beauty. What is it in the human mind that thus denies the law of God written in the heart, which yet constrains men to obey it as 'good citizens, honest men, good husbands, and fathers?'

M. Carl Vogt vouches for the fact that he and his friends are such characters, but he concludes his work on man by evidence that he mistakes what kind of men true Christians really are. He says: 'They require the fear of punishment, the hope of reward in a dreamt-of beyond, to keep in the right—for us suffices the consciousness of being men amongst men, and the acknowledgment of their equal rights. We have no other hope than that of receiving the acknowledgments of our fellow-men; no other fear than that of seeing our human dignity violated—a dignity we value the more since it has been conquered with the greatest labour by us and our ancestors, down to apes.'* A conquest without The greatest labour without a purpose! intention! Equal rights without equal sense of right and wrong! Alas! there is the unreason of a passionate confusion in these unamiable sentences, O Vogt. We and they are here treated as if of diverse genera; but surely the existence of those who fear pain, hope for joy, and dream of a world beyond this, as much demands explanation as that of any who have learned to value the dignity conquered for them by their ancestors down to apes. For

if—to be very personal—thou, Carl Vogt, be conscious of thy human rights, with no other hope than that of being acknowledged as a man, and no other fear but lest thy dignity should be offended, this fear and hope being only the natural result of the struggle of ape-nature to acquire human dignity, the hope, fear, and dream of the beyond, charged against the poor pusillanimous party, must have the same simian origin as thy hopes and fears, that is to say, if thy theory of development and apeconquest be true. Thou hast only to prove that such hopes and fears, with the sense of human rights, personal dignity, and moral responsibility, are derived from the ancestry thou claimest, to secure the universal acknowledgment of thine immense genius as a man and a discoverer. But is not the dignity for which thou fearest rather to be called thy self-opinion?

The dignity of human beings would be but of very diminutive value at the best if, when a man stood before his fellows as consciously most worthy of the honour he claimed, he abruptly ended by falling altogether into the grave. In short, the world has never heard of the true dignity of man but in connection with the faith that brought life and immortality to light, and said, 'Honour all men.' God, the faithful Creator, is theirs for ever. So we believe that Vogt, like some others, has perverted science under the blinding influence of prejudice, arising from ignorance of Christianity, which is nothing but love, Divine and human, and is essentially justice, because it cannot endure that men should wrong one another; but while

embracing the penitent as one escaped from the death in sin, it repels the wilfully wicked as selfish, cruel, and deadly. Therefore Christians pray that all men may feel the truth and power of Christ, and escape what is false and destructive, such as the science that excludes God from His own works and leaves man without hope but from man. The conflict of opinion amongst those who believe themselves the ultimates of some anthropoid 'primate' leaves it undetermined whether mankind sprang from one species of extinct ape or from several, and, of course, we shall not be able, on their ground, to decide the question as to the unity of the human race, until they have completed their enquiry and agreed concerning the results. In the meantime, we had arrived at a conclusion on other ground, and even imagined that we had at least the Book of Genesis in favour of our views. But, according to the mode of interpretation adopted by the advocates of another strange theory, it appears that the language of the Bible is rather favourable to the notion of several distinct origins of man. Those who maintain this notion are also divided in opinion; some implying, if not asserting, several direct creations of man; while others seem, like Vogt, to discover sufficient reasons for the existence of the various races of man in the fact that there are various classes of apes from which, as they imagine, the human races may have been developed.

The unity of the human race, however, is still affirmed, because the most scientific anatomists and ethnologists believe they find proofs in their respective

departments that human nature is unique, and only of one genus and species. To assume that one species to have resulted from the blending of men from an indefinite number of centres, or from successive creations, would be both presumptuous and unscientific. Those writers who have obtained some credit and more notoriety by asserting that the families of mankind are of various origins have also laboured to prove that they have so little actual relationship in their natural structure and functions as to be incapable of intermingling; and, of course, those writers have consistently contradicted all who, from their knowledge of anatomy and ethnology, believe that all mankind is of one species. as they have not yet shown any species of ape adapted to produce any kind of man, nor attempted to point to any lines of demarcation existing between the various races of man and precluding their intermarriage, such writers affirming their belief in such things may reasonably be referred to their studies and be left, with what skill they may, to carry out their enquiries. Even Vogt, while contending for diversified simian origins of man, yet acknowledges that there is a unity in mankind at present, which he attributes to their having so freely mingled together. But it is obvious that if the present unity have resulted from the intermingling of the different races so-called it is certainly quite as possible that those races have arisen from one origin, and become diverse by the circumstances attending their dispersion from one centre.

Thinking men, without faith in the Bible, will of

course endeavour to explain the existence and peculiarity of man according to the light that is in them, and by the help of whatever amount of science they may possess. So far from deprecating their endeavours, we should be free to thank them for whatever truth they can bring to our knowledge, for all truths are Divine and intended to be known and applied. The grand difficulty is to distinguish a reality from a mistake, when this is disguised under the seeming scientific garb with which ingenious thinkers are so apt to clothe the conceptions of their fancy. True science will bear the severest testing, but we shall find that much that passes under the name of science is founded only on erroneous judgment and partial observation of facts, leading to outrageous assumptions, and to inferences involving unlimited confusion. Those who have recently, with so much skill, propounded their views in respect to the origination of man, and his antiquity on the earth, we believe, from patient intimacy with their writings, have honestly bewildered themselves and equally bewildered others by their hasty temerity in assuming possibilities when finding a deficiency in the supply of such facts as were required for their theories. Mr. Darwin and Sir C. Lyell somewhat obscurely intimate their desire to discriminate between their speculations and their actual science, but many of their disciples not possessed of their tact and learning fail to observe the distinction. Hence a kind of smaller philosophers are now prevalent who think they believe, as they teach, that man was verily, in some remote era, in the immeasurable ages,

gradually raised in character and style of mind by the pressure of circumstances and natural selection under which a first-class pair of apes begat the lowest possible pair of approximate human beings.

The subject of man's antiquity is not touched on in this volume; but his speech is a necessary part of the subject, considered in relation to man's origin and endowments. With such philosophers as those just mentioned the only way of accounting for the existence of language is that of supposing the earliest family of paulo-post anthropoids to have acquired a small advance upon the best apes in their voice-organs and fineness of ear, as well as in corresponding development of brain, so that they could not help chattering and imitating the sounds of things about them, until they learned to associate those sounds with ideas of the things themselves.

They were beginning to have rational ideas, and as the ideas would sometimes recur when the objects associated with them were not present they uttered the sounds representing the ideas, and thus, by degrees, formed a language with an inherent grammar. Thus different modifications of a roar would serve to indicate the nearness or distance of a supposed lion, with signs, also, of the temper it might be in. Hence, speech on the principles of pure onomatopæia. As such semisimian beings are presumed to have always possessed a disposition to improve their advantages from generation to generation, they not only extended their language with the extending range of their minds, but

they at length became manufacturers likewise. There must have been full time for the purpose in the many hundreds of thousands of years intervening between the first transition of ape manwards, to man himself, as we find him. The makers of the flint implements, for instance, as some say, had, probably, a slight vocabulary, and could voluntarily suggest ideas to each other by sounds almost articulate. Some philosophers, however, suppose that the flint-implement manufacturers were so low in intellect that it is quite a question whether they had any language. Sir C. Lyell, from his ideas of geological data, computes that 150,000 years passed without any improvement in the 'make' of their weapons,* which could scarcely have been the case, one would think, had they enjoyed the benefit of being able to talk the matter over together after the manner of other social reformers.

The inference as to the required time is drawn from the remarkable circumstance that the flint implements in the drift on the slope of the lowest bed of the Somme are precisely of the same character as those found in the slope of the supposed highest level. This fact may well induce us to suspect that the opinion of M. Elie de Beaumont, the eminent and veteran geologist of France, is correct, namely, that the gravelly drift referred to is not, as Sir Charles Lyell supposes, of the quaternary or diluvial age, but really a member of the terrains meubles, that is, of the actual or modern

^{*} See Lyell's Antiquity of Man.

period.* This opinion, at least, throws a new element of doubt on Sir Charles's inference, which is founded on a theory that requires us to believe many things not proved to be true.

Perhaps the manufacturers aforesaid invented flint implements only to destroy one another, according to the custom of savages. But, unfortunately, craniologists have not been able to discover any authentic skulls of this very ancient stock of an extinct European family. Possibly they not only warred with wild beasts, but, worse than wild beasts themselves, they ate one another, bones and all. This would account for the scarcity of their osseous remains in a fossil state, along with their flint batchets. We do not even find the required traces of phosphate of lime in the soil with flint hatchets, and the slight appearance of this material in soils in general is, by the by, a fact rather opposed to the immense antiquity of man. The state of the earth invalidates the notion that it has been inhabited by mankind for incalculable ages. ought certainly to have left the earthy matter of their bones behind them; and, moreover, one would imagine that a race that could fix a flint in a cleft stick and hollow out canoes with fire and flint tools, would also have been able to fashion pots and pans of clay, and burn them into hard stoneware. But if they had done so, though they dwelt in France only 50,000 years, as the advocates of the high antiquity of man think they

^{*} Athenœum, May 23, 1863.

must have done, on the shortest computation, they would have filled the land with potsherds, if with no other evidence of their existence and their handiworks; and if they had not made any advancement in the manufacture of tools and weapons, some other tribe was likely to have done so, and have wiped them out of their 'location' in something less than 50,000 years.

It would be rather a startling argument for the fixity of races if the present eloquent inhabitants of France sprang from such low-minded nearly mute ancestors. No; we are not for a moment to infer that any Europeans now existing could be derived from such a low set of Europeans before them. What became of them and their offspring, however, we are not informed; but such a half-human race, that could at best only howl instead of speaking, were, of course, neither of Aryan nor Semitic connection; for are we not told by received authorities that none but Aryans and Semitics were ever sufficiently developed in brain to originate and diffuse civilising ideas and words in Asia or Europe? These flint-imple-

^{*} It has been inferred that the civilisation of Egypt had preceded any received chronology by at least 10,000 years (see Bunsen and Lyell). The evidence was supposed to be found in remains of burnt bricks and earthenware, a few fragments of which were presented to Mr. Horner, as if the diggers had discovered them, from twenty to thirty feet below the present surface of the soil deposited by the Nile. If, however, Egyptian civilisation had been of such a date, instead of a few doubtful fragments being found, such remains ought to have been found in immense abundance, as they are found where man has been known to have long dwelt, in Babylonia for instance. But unfortunately, as Mr. Sharpe shows, Mr. Horner found Roman brick, if any, at the aforesaid depths, and founded his inference of Egyptian antiquity upon that!

ment makers could, of course, have had skulls no better than next of kin in mould to the worst Australian natives, or some tribe of Africans yet to be discovered as the profane link between negroes and gorillas, and so they were swept clean out of creation, not even leaving a trace or a dint of one of their skulls behind them.

Believers in the low savage first man, nearly languageless and idealess, and also believers in the gorilla origin of mankind, are rather hard upon those who believe that man was created man with speech soon superadded. They expect us to take their word for it that the lowest possible savages did by degrees exalt themselves into the highest style of man, and yet that the Aryan and Semitic races had no original relation to the rest of mankind. This is very severe logic. Are we capable of understanding it? Or must we receive it whether we understand it or not? We are also told we all sprung from brutes, and yet we are not to listen to testimony which asserts that the highest style of man may by force of growing ignorance, wickedness, wandering, and wretchedness, through succeeding generations, be degraded at length to the lowest place in the scale of humanity, even losing, like idiots, all trace of religious and mental enlightenment and retaining only such language as corresponds with their degradation. Yet there is no race on earth which does not prove, by the possession of remnants of language and of art, that their ancestors at one time stood in closer connection with some centre of comparative civilisation, just as some of

the present peasantry of Connaught, degraded as they are, indicate their direct connection with the Indo-European or Aryan races, by their language and by traditions of a genius above their own. We grant at once that it would be no disgrace to man if it could be proved that Omnipotence developed him from a reptilian spawn and endowed him with speech. That would be but a manifestation of Almighty power and wisdom. But it would derogate from the reverence due to the name of Deity to imagine that He made man a degraded being to learn language of brutes. It is no degradation to possess a body formed of ordinary chemical elements and controlled and organised by an indwelling life, and to be resolved into dust and gases when life departs. The degradation would be to abuse the body by a degraded will, which expresses itself not only in acts but in words as the direct vehicle of thoughts. Language, in fact, is the fullest action of mind: therefore, by our words we shall be judged.

The theory of man's origin and self-elevation, now advocated by certain lecturers on science, who exclude especial revelation, and endeavour to supplant or supplement the pulpit by their platform on Sunday evenings, will probably convince themselves and many of their audience that the Babel language of their science is that of true inspiration. But they will not prove that their science always speaks truth or can much improve the reason and conscience of man. Nature has a divine voice indeed, and a language too, which her ministers are ordained and entitled to interpret, if they can, at any

time when the Lord of nature is not employing other means to address us; but it is profane impertinence to obtrude their clashing 'ologies' upon us on the day appointed to hear what He who died and rose from the dead for us would say to us. A theory, however specious, that excludes the fall of man can never show us how man can be restored. As Schiller says, 'The fall was a giant stride in the history of the human race;' but science without that fact will make a giant stride backwards in attempting to improve man's morals. spoken and written truths which alone present us with a consistent philosophy of man's contradictory nature, the very truths on which the highest civilisation is based, are utterly wanting in bare natural science. our power to interpret nature be our only guide to religion, alas for our best hopes! If the heart's cry for the living God, as our God, be not proof that God has made the soul of man craving for converse with Himself, we are deceived to an unsurpassable degree. Are our highest aspirations to terminate in a knowledge of the forces of nature? Away with the thought! The laws of the material universe are fixed and inevitable as the order and stability of that universe demands, but there is still a free spirit in man that seeks its highest heritage, not in nature, but in God, who has spoken and still speaks to man, not in spirit only, but in words also-words, too, that are life to man's spirit, words not from man but to man, without attention to which the spirit life of man lies dormant.

CONTENTS.

CHAPTER I.		
Man as a Fact	AGI 1	
The existence of man to be accounted for—design and meaning expressed in the formation of man—the first of human kind—the testimony of self-consciousness—man's relationship—a perfect man ideal—human love an especial power—man may be as he ought to be—a scientific definition of man—the Greek ideal man, Apollo—the doctrine of man's divine origin taught by the ancients.		
CHAPTER II.		
THE HUMAN BODY	17	
General impression of man's appearance—the human face—man's likeness to apes—his anatomical adaptations—hands—feet—teeth—brain—balance of head—the human body not merely for animal purposes—reason in relation to future existence.		
CHAPTER III.		
THE HYPOTHETICAL GENESIS OF MAN	35	
Man's relation to lower creatures—development from endeavour—evolution from one germ—tendency to variation—Oken's, Lamarck's and Darwin's hypotheses—original germ—Huxley's anatomical studies—no continuous series—adaptation of forms—fitness to enjoy—dogmata of Oken—life breathed into a body—analogy and difference—laws of growth and reproduction—vestiges of creation—local origin—man's halleluiah—branches and fruits of life's tree—proofs wanted.		

CHAPTER IV.	PAG
CREATION NOT CONFUSION	58
Man a creation not a transmutation—identity of nature preserved in kinds—deviation and monstrosity—natural selection impossible—avitism and divergence—man's moral standing against Darwinism.	
CHAPTER V.	
THE MORALE OF MAN AND BRUTE	65
Mind not to be tested—mind and matter—man's mind in re- lation to facts—minds not of one kind—separate existence of soul and body—theoretic assumptions of Darwin and Huxley —structure and function—determining forces—avitism against transmutation—inference.	
CHAPTER VI.	
MAN THE PRIMATE	7 8
Man's the first place—man's place not quite anatomical—affinity not in likeness but in power—capacity to do determines man's place—a savage not near akin to ape—the ape utterly other than human—ape's place and fitness—human infancy an argument.	
CHAPTER VII.	
LIKENESS AND UNLIKENESS	83
Man's likeness to ape apparent—the disparity real—human body subserves human mind—the facts of man's history—adaptation and fixed affinity—law and order involves kinds—a first of every kind.	
CHAPTER VIII.	
Extremes meet	90
Inter omnigenesis demands large faith—how brought about—true development not transmutation—necessity of limits—transitional link wanting—how Professor Huxley's embryo man differs from dog—Owen versus Huxley—man's embryonic life not other than human—common plan not common development—man not truly comparable to ape—man's grand distinction, power to learn duty and do it.	

CONTENTS.	xix
CHAPTER IX.	PAG
Speech	103
Thought demands speech—language relates to mind as well as voice—organs—cause of difference and divergence—maximum of brute away from man—man improved only by discourse and reason—man's moral and spiritual need—uttered truth man's hope. CHAPTER X.	
Life, Breath, Spirit	111
Life with breath—creative inspiration—creation ordered to sustain life—organisation and life—soul and life—identity amidst change—ideas never die—selfhood, body, and life—life precious—the soul the seat of sensation—the soul's mode of life—health and life—composition and decomposition—bodily life—soul—life connected with its source.	
CHAPTER XI.	
Man not Anatomic	138
Man and the All-father—the individual and his body—man's nature and place in nature—all forces invisible—action points to will—the soul a power in the body—soul as aspiring to know its Maker—self-consciousness and knowledge—man most man when most Godlike—conscience not explained by science. CHAPTER XII.	
THE FIRST MAN A DIVINE IDEA	146
The earliest not the lowest style of man—ourselves to be accounted for as conscious of being made—how man was created —man not derived from lower nature—man's attributes distinct at first as now—man though perfect capable of being perverted—the first man superior to any present man—direct creation a mystery to be read.	
CHAPTER XIII.	
PARENTAGE, INDIVIDUALITY, PERSONALITY, GOD	155
Every living being now existing derived from parents—parent- age or law in the creation of kinds—various modes of per- petuating kinds—parentage proves the completion of creation	

—import of mediate creation—each individual a modification of a kind—sense of personality—the Creator of persons a person worthy of trust and worship.
CHAPTER XIV.
THE FIRST MAN NOT BORN A BABY-BABOON NOR MADE A SAVAGE 165
The first man not born and nursed—what kind of mother could the first man have had?—instincts preservative of specific characteristics—the first man could not be a savage—savageness a degradation—man made for his place and his place for him—the senses and their impressions—mind in relation to light and the Revealer—in what sense man the image of God.
CHAPTER XV.
Man's First Vision
Light in relation to vision and mind—at what apparent period of life was man created?—neither born nor developed—man an anomaly if without relation to his Creator—man's first state imagined—body for mind and mind for nature and its Maker—awaking to self-consciousness—a teacher in human form demanded.
CHAPTER XVI.
Man's First Place
Man's right place his first place—probably near the western Himalayas—Cashmere—Indian tradition and Mosaic statement as to man's first abode—Iranian seat of Paradise near Cashgar.
CHAPTER XVII.
THE FIRST MAN AND THE VARIETIES OF MAN 195
The first man portrayed—from such a man all men may have been derived—modifications by climate—effects of mind in moulding the form and features—disregard of natural laws—physical degradation and moral dereliction—civilising power of Christian teaching—man not improved spontaneously—revealed knowledge—Hamite, Japhetic, and Semitic blending—influence of revealed truth—the enigma of man's origin best explained by the Bible—testimony to the unity of the human race.

CONTENTS. XXXI
CHAPTER XVIII.
Human Freedom
Freedom of will a human prerogative—freedom, variety, and conformity—forced conformity slavish—the first man free to be happy by obeying the good—dominion of man's will—obedience to Divine will the liberty of reason—the pleasure of knowledge incomplete without knowing the author of truth—to obey Divine law is to work divinely—man needs God's teaching to complete his reason.
CHAPTER XIX.
MORAL LAW
Moral law and free agency—law expressed—obedience or dis- obedience determines destiny—no recovery but by Divine remedy—brutes without morals—no responsibility if no reason —instinct without perception of moral good and evil—man proved supernatural by his moral perverseness—conscience and free will—self-government and holiness—moral and in- tellectual powers co-operative—good never lost—moral instruc- tion and prohibition—sin—the first law arbitrary—sin and death—conscience marks fallen man—thinking men conscious of sin—when conscious of sin man seeks a Saviour—Divine love the ground of man's obedience.
CHAPTER XX.
THE ORIGIN OF LANGUAGE 242
Man needed language and God imparted it—the three theories of language—the mute origin of speech—the intuitive—the sympathetic—man's sympathy with nature—Max Müller on roots—the origin of language illustrated by the case of Laura Bridgman—reason not complete without language—the state of savages—their recovery through truth in words—the English tongue.

CHAPTER XXI.

Instruction overcomes obstacles to mind—action—speech and thought—the silent system inhuman—language develops mind

THE FIRST LANGUAGE NECESSARILY TAUGHT .

Digitized by Google

. 257

CONTENTS.

—the teaching voice and presence with the first man—language and truth—language as the product of an individual mind—speech as the organ of reason—language and naming—syllables and speech—organs—consistency of the Scripture narrative—streams of language from one source—the Divine Logos fulfils man's claims to be taught.	AGE
CHAPTER XXII.	
THE PRIMEVAL LANGUAGE	77
Claims of the Hebrew—Hebrew as the vehicle of highest thought—Farrar on Hebrew—the Hebrew Scriptures assume that Hebrew was the first language.	
CHAPTER XXIII.	
Man and Woman	84
The gift of speech prepared man for woman—man's fellowship with woman—God's gift of immortality to man through woman—human creation completed in woman—the first man's ideas of woman.	
CHAPTER XXIV.	
WORK, DOMINION, WORSHIP	96
Genuine work—cultivation of the beautiful and useful—the fulfilment of man's duty—scientific culture should be religious—cultivation of corn—wheat, oat, barley, modifications—Mr. Cowper's difficulty—the cereals and man's power to cultivate—corn a direct gift of God to man—man's deficiency without art and instruction—man's interest in animals—man's dominion and knowledge—man's first state of mind—light arising in darkness—the perfection of man restored.	
APPENDIX.	
THE NEGRO	25

THE FIRST MAN

AND

HIS PLACE IN CREATION.

CHAPTER I.

MAN AS A FACT.

Man as he is has not yet been accounted for by philosophers. If they do not possess power of mind equal to the explanation of a fact so common among natural phenomena as the present existence of themselves, the first step towards a correct anthropology has not been taken; and therefore we need not wonder if they stumble on strange theories in their attempts to make us understand how man happened to come into existence at first. It is but vanity and vexation of spirit to discourse about man's mind and body, with the variety of his races and his doings, if men cannot come to a conclusion, from the knowledge of their own qualities as human beings, why they were made, who made them, and what is likely to become of them.

Any comparative anatomist, worthy of the name, can read in the structure of an animal the kind of life it was designed to fulfil. The physiologist also can infer its habitat from the knowledge of the provisions necessary to supply its different wants, and so localise it at once, as well as classify it in relation to the rest of the animal kingdom. He would also, as a rational matter of course, conclude that there was once a first of its kind, which, also as a matter of course, must have been organised pretty much like the specimen under examination. In the same manner we reason concerning ourselves, from our bodily formation as well as mental constitution, and take it for granted that the first man was the same kind of being as ourselves. therefore, we would learn anything definite concerning the first man, we had better study our own wants and the provisions made to meet them. If we are not content to know ourselves as merely nati consumere fruges—born to eat, drink, and die—we shall desire to learn what is the design of our existence, since that existence itself is a proof of design implying special adaptations to ourselves. Now, when we have arrived at a proof of design, we have also come to meet a Power with a will sufficient to account for the existence concerning which we are enquiring, that is to say, an Almighty Designer; for reason assures us that any power less than Almighty could not produce a living creature like man and provide for its wants. With respect to man, we have, therefore, to consider the inherent wants of his spirit as well as his body, and if

possible to determine his relation to his Maker, not only on the ground of his demand as a creature to be especially provided for, in consequence of his peculiar bodily adaptations, but also as to his spiritual nature, with its hopes and its fears in relation to an everanticipated future, and its capacity to know, to rejoice, to suffer, in a manner unknown to any other creature on earth. Design implies a beginning and an end or purpose; therefore, if human nature as a whole evince design, its origin involves whatever in that nature remains to be fulfilled in the history of any individual as derived from the first man.

The dispositions of a living creature, as well as its form, are included in our ideas of that creature. Every living thing belongs to a kind of which there was once a first of that kind, and that one had a place prepared for it, not only as to locality in space, but also as to its dispositions in relation to creatures of other kinds. There was, then, a first man and a place prepared for that man, considered both as a kind of living creature and as requiring a local habitation suited to his bodily and mental constitution, with every provision for his nature. And what is true of the first man's nature is true of everyone descended from him. With respect to other animated beings, if we know their structure and instincts, we find no difficulty in assigning them to their class and order. To what class, order, genus and species of Animalia does man, then, belong? Duly to answer this question, we must consider the matter somewhat at large.

Homines sumus, and our own consciousness is necessarily chief witness in the evidence we seek to establish our position; but in meditating on humanity as a kind of existence, object, and subject, the being that thinks and the being thought of are united. This fact alone in a marked manner distinguishes man from all other animate creatures known to us; for of no other can we affirm that it is capable of reflecting on its own peculiarities, or of inferring anything concerning itself by making its own consciousness either a subject or object of thought. We cannot say that even the most sagacious of mere animals thinks, in any rational sense of the term. Therefore, the fact that man thinks of his origin and end is a fact to be included in our idea of man, and in our consideration of his existence and his destiny.

In endeavouring to determine man's place in the created order of living existences in this world, we must first ascertain what we can of his own individual nature in its completeness. We must know what he is before we can decide on his relationships, or how he stands with respect to other creatures also known to us. When we have ascertained what kind of being he is, both in body and mind, we may be able to discover what he was made for, and then perhaps account for his existence. But in order to arrive at just conclusions in this respect, we are required to consider both the best and the worst example of a human being we can either remember or imagine. We must reason both from his lowest and his highest qualities, from all

we know of his excellence as well as his degradation; as a creature calculated to excite our love, honour, and admiration for his nobler endowments, or only to be dreaded, despised, and abhorred, for his acquired or inherent baseness. In estimating man, then, we have an element to deal with which never comes into the account when reviewing the characteristics of any of the lower animals. We have to do with the moral state of man's mind and will, since he is certainly, as a rule, able to understand the demand of some moral code, if not all the Ten Commandments, as binding upon him. Moreover, there is this peculiar mark upon man: he alone is capable of love and of hate, morally speaking, that is, in respect to what he believes to be good or bad. In short, we cannot completely know man without knowing both sides of his possibilities in relation to good and evil, morally considered.

The difficulty immediately before us is this: we want a perfect specimen of a man, and cannot find one. If there is not, and never was, such a creature, then man is an exceptional being, for specimens of all other creatures, perfect of their kind, are procurable.

We cannot describe what we never saw—a perfect man. Yet reason seems to say there must have been such an one at some time and somewhere. The question is, where and when was he, and what has become of him? The answer to that question is not propounded in any system of philosophy or science extant since the burning of the Alexandrian Library; and there is no tradition that the answer was ever given but in one

book, and that is neither philosophic nor scientific, though certainly containing more truth about man's moral nature than ever appeared in any other book, that is to say, if the testimony of all the world's best minds be of any value on the subject.

A naturalist does not reason concerning the nature of any animal, but from a supposed perfect specimen; therefore, that we may reason as well as we can concerning the nature of man, we will do our best to obtain an idea at least of a man in all points as he should be. As this must be the divine idea of man, we might satisfy ourselves by assuming that we possess the authoritative description of that idea. But it is not our business to assume, but, as far as we may, to reason from what we know of human nature. Where, then, shall we turn for our ideal man?

Men of fine mould in body and mind are not such rarities that we cannot point to any who might pass for types of their race, such as it is. Yet it is not improbable that if the most ardent and amiable woman that ever metaphorically adored her husband or her lover, could be calm enough at heart to be influenced by her intellect in this matter, she would acknowledge that the man she loves is not without his faults. She loves a hero which she never sees, but still delights to believe in. She would, of course, very properly say she only loved him the better for his defects; she does not want an angel, but a man on a par with herself, to sympathise with her, and so forth. And he would return the compliment. Indeed, as man's consciousness in-

cludes much of woman, her lover, if he spoke his thought, would be apt to say even to her he loves as the best of her sex, 'Frailty, thy name is woman!' We, of course, suppose the man to be for the time free from that delirium of love in which he madly dreams of a perfect leveliness he never otherwise beholds. Yet a man may love a bad woman with a thorough heartiness without being mad; he may determine in a very rational manner to imagine what he does not see. wishes to love totally and intensely; it is the happiest feeling he can know; so he invests the object of his affection with every excellence of person and character which his own attributes enable him to conceive. looking in thought at what he likes and loves to see, he makes the idealised idol of his soul a very good and splendid creature indeed, the best possible, in short, which his own imperfections will allow him to make. And then, when the rude exigencies of actual life reveal the real woman as in need of help even from his own weakness to sustain her in an attitude of endeavour to be a help-meet for him, he blames her before the face of God, instead of repenting and confessing his own sin in modelling out of the imaginary materials of his own mind an idol to his fancy, a thing in which he worships only himself. Alas! we love with all our will where we have no choice, and cannot love what we ought to choose. But it is no sin to cover an imperfect object with a vestiture so beautiful and accommodating that it will conceal all defects, and bring out to sight the inherent graces that without such a clothing would

remain unrevealed. Love, both in giver and receiver, imparts dignity, beauty, interest, loveliness, and eternal worth, because love is like light, it has a perfection of nature in itself and clothes what it embraces with its own glory. Its power to make manifest what is evil and untrue is its highest excellence, because it manifests not to expose but to remove the bad and supply the It is for ever giving, and that because it is the fountain of all faith, hope, and enduring virtue; it never fails, but grows fuller and freer as it flows like the river of life. The love that hides faults and believes in their ultimate removal is the only love that can be constant. While capable of feeling to the full the beauties and the excellences that incidentally meet the eye and gladden the heart, the soul that has bound itself by a true covenant to another knows no temptation to break that covenant, for it is made not so much in trust on its object as in faith with Heaven who gave it. The enlargement of one's own being arising from such affection is committed altogether with oneself to the mighty Heart that protects all trustful weakness, and, while touched with a feeling of our infirmities, confers the love that becomes purified and perfected by its necessary trials.

It is the peculiar power and property of the human soul strongly to love all other human souls in proportion to its own purity. In this proportion it perceives the immeasurable value of beings made capable of ever growing in intelligence and moral excellence, and therefore in happiness. As this capacity of loving distinguishes man, it must be in this characteristic especially that man is the image of his Maker. No gleam of this moral attribute of loving appears in creatures below man, and they are equally destitute of its opposite, hate. Therefore, they cannot sin, for sin is willing and doing against known love.

The best type of the human power of love remaining on earth is seen, perhaps, in a mother that believes in Jesus as her Lord, and who, therefore, also believes in the immortal, unveiling, perfecting life to come after She can love what, as a seeress of souls, she death. beholds as of her own kith and kin in the humanity smothered up and nearly altogether hidden in an idiotic mass of deformity, where no spark of reason relieves the chaos of discordant instincts. She loves her idiot with tears, for she believes in the ultimate righting of the wrong, which is no fault of her poor imbecile, without brain enough to hold one idea, and unable to love as yet. She loves also, and with greater agony of love, her guiltiest child that grows up to war with and hate her love; for she can pray to Him who can make all things anew, and feel certain that He will not allow His love to be after all without proof of its omnipotence. her feeling, is not a mere maternal instinct, but it is a virtue superadded to reason, by her soul reaching out of her heart to touch the hand of God. And she has touched it, her love has a glow of Heaven in it, her hope is full of immortality, beyond the power of disorder and degradation to disturb it. Glorious is the life of such love; it is stronger than sin and death. To

live in such love, is to live in God, who is love. It is love that reveals the fact that there is a perfect man somewhere, the likeness of Deity, the model of man as he should be and may be. If that is merely sentiment, thanks be the sentiment is brought out of eternity, and written down in black and white for us to read and learn, that we may do and die upon its strength. 'What,' say you, 'is the philosophy of this?' Well, if not all the philosophy of man, what is it? Do we not live and love according to our faith? And is not what we believe the life of our will and habit in thought and action? Thus, as faith works by love, so love is the reflex of faith, and believe sall things and endures all things to a righteous end, that is, to the perfection of the man who thus believes.

Have we wandered away from our subject? By no means. We asked for a perfect human being; and the loving heart, that best knows how to discover such a being, answers that it knows none, and only hopes to know. In truth, the ideal man, including woman, remains to be realised. There is a feeling in every human heart, once awakened to the true beat in keeping with the heart which uttered the law fulfilled in love, that human beings have existed, do exist, and shall be known to us so perfect that not a blemish shall be found in them, even by the Eye that penetrates the thoughts of all the universe.

But not one of human mould yet beheld by any of us quite equals the image that seems to live before the mental vision, when we think of what man ought to be in

bodily presence and completeness of soul. The highest conceptions we can bring together from memory of varied partial excellences fail, when combined, to represent the whole person and character we yet imagine a man should be to fulfil our own ideal. What Power, then, is that which impresses our spirit with the consciousness of a humanity somewhere so divine as to be worthy, not only of all human but of all divine love? We fail to conceive what we yet inevitably believe to exist. We fail, because we ourselves are so marred in the powers of our souls. We fail, because we seek the image of God, the very idea which the Creator of thoughts and things alone could form into a fact, which in materials of earth should embody a moral being truly to represent his Maker. Shall we ever be able to realise that idea objectively till we are ourselves transformed into that image? Is not that a truth, When He shall appear, we shall be like Him; for we shall see Him as He is?' He is the archetypal man that has ever haunted the human mind.

We have been thinking of man in his highest aspect, as a moral agent capable of assenting in mind and heart to a law which, if obeyed, would perfect his character and conduct. In that respect, it must be acknowledged that man stands alone and altogether separate from all other living creatures on the earth. But we wish now to determine whether the mere bodily formation of a perfect man would be such that we could find his proper place amongst the mammalia. We may, if we can, philosophically divest ourselves of

our preconceptions concerning the bodily form of man, as derived from our familiarity with that form. But after all this strain upon our minds, what we have seen will constitute our type. If we can travel back in thought till we fancy we see the first man with the impress of Divinity fresh upon him, what even then have we found? Only a poetic picture, the phantom of an indescribable creature

Can we tell to what genus and species of animal man belongs from this? Only two words—erect and naked are of any scientific value. Shall we look for man's true lineaments to the definition of Linnæus? The very term by which he designates man, Homo sapiens, throws us out; for if a man is not a man unless he is wise, what are we? But he only makes man one of the apes, after all, and sapiens is added out of compliment to himself and us, as more knowing than any of the homo genus non sapiens. Linnæus well says to the reader, by way of defining the primate, 'Homo, nosce te ipsum; and he would, without doubt, indeed be a true homo sapiens who followed the precept, 'Know thyself,' and acted according to that knowledge. not man a spirit incorporated and localised by his body, that his mind may be restrained and compacted through his senses, in keeping with the conditions of earthly

existence, and that he may measure his movements of thought and action, mind and muscle, in relation to others who, for social and intellectual purposes, are by their bodies also constrained to move, in respect to time and space, after the same manner? All creature relations are those of time and space, and therefore there is a natural animal body and there is a spiritual body. The body of man, then, would be perfect when perfectly adapted to accommodate and express the *ipse ego* that actuated it; so that Linnæus was right when he said, 'Man, know thyself;' for only with this knowledge can man find his place in the classification of his body and his soul. The body is the soul's vehicle localised in time and space; but what is the soul but the man himself?

We do not desire to be scientifically set upon the shelves with the apes and monkeys; we do not see why we should be anatomised, and forced to sit and represent ourselves in our bare bones, with skeletons of tailed monkeys or tailless apes; we never associated with any of either class during our lives. We, or some of us, require consecrated ground even for our bones, and profane is the hand that would merely make a scientific show of them, and tell our friends how very like a gorilla's they are.

We wish to see the best example of a human body to be conceived before we settle in our minds whether we are to be ranged in a row with apes or not. The intellectual Greeks, with fine living models always before their eyes, have better succeeded than any other people in their endeavour to body forth—at least in marble the conception of the human form without fault or flaw. And how did they proceed? They took all the best features of face, and all the best mould of limb, and brought them together and wrought them into one harmonious whole, to represent the nearest approach they could make to the proper form of man. And they, too, were right. The true idea of man perfect in form and faculty is the best to be found in any man, or in the whole of mankind. We will therefore, for the occasion, imagine that the glorious Apollo is, in outward make, the nearest approach possible to the embodiment of a perfect man, and therefore the likest we can get to that of the first man-the divine idea embodied. It is perhaps the best we can now obtain, and will at least express the might of man's mind in empowering the hand of man. The setting sun is mingling his glory with the clouds of heaven, and together they throw a roseate glow of life upon the pure white statue of that sun-god, which we accept as the best image left us of bodily man, a being endowed with capacity to fulfil his intelligence in corporeal action. We cannot separate the body from the expression of the ruling soul. The shaft from that bow has pierced the writhing Python, which we fancy, but cannot see; and on that face and in that attitude a will is visible that conflicts with evil but to conquer it. Here we see the man who carved Apollo, a man who had a will to vanquish the grand serpent. He has made that archer's eye follow the arrow to the Python's heart.

But a real living man will do as well, or better, for our purpose of determining man's present place in creation—for living men find and fill their places, which are not precisely beside the conscienceless baboons. All men meet a Python in their path. We have reason, therefore, for looking at Apollo. He was the Greek idea of a perfect man, the divine man, at war with evil to subdue it. And in tracing up the derivation of the idea expressed in the character and exploits of Apollo, we discover the connexion with Osiris and Horus, the Egyptian myths, which again point back to some earlier symbolism in which the restoration of humanity was promised by the God-man of woman born-born to die and live again-who should win eternal life for all men, in virtue of his conquest of the serpent, the symbol of deception and of death. Apollo, the conqueror of the serpent, was son of the supreme God by a human mother, and sent to earth to keep the sheep of Admetus, in which name we see a trace of Adam. Hercules was reckoned as twin-born with Apollo, and his attributes are indeed but another form of the Restorer, who combats evils, and yet dies by the venom of the serpent he had conquered. The same idea runs back in the Assyrian, Chaldean, and Indian astronomy and mythology, just as it pervades the stories of the twelve chief gods of Greece and Rome; being found also in the twelve signs of the Zodiac and their decans; alike in the zodiacs of Dendera and Esné as in the still more ancient zodiacs of Hindostan; thus indicating by their agreement the existence of an intelligence anterior to

either from which all the symbolic embodiments of the first prophecy—the prophecy of man's triumph over evil—were derived. That prophecy is either true or else the invention of man's mind, as containing a promise the fulfilment of which shall fulfil man's desire and his hope. That desire and hope must then be natural to man—given him, in fact, by his Maker. Therefore, the philosophy that would account for man's existence must be a false philosophy, if the existence of that prophecy, promise, or hope be not taken into the account and itself accounted for.

CHAPTER II.

THE HUMAN BODY.

HERE, then, stands an embodied man. Can we infer his origin from his present appearance? He is unclothed, or covered only with feeling, and self-balanced in uprightness; all parts of his body, nerved by will, marvellously consent to preserve that position against a force that constantly tends to drag them to the ground. He has a centre in himself. The upper limbs stand out in symmetrical ease and freedom beside the lifeorgans as if ever ready to protect them. Here are real perfect hands, never employed pronely for progression, but completely adapted to the use and purpose of a high intelligence, a will conjoined with reason. Here, too, are perfect feet, conformed to the rational soul equally with the hands. Such is the general impression: let us observe more particularly.

See, first, how the majesty of mind sits enthroned on that brow, and speaks its power in every feature of that face. There is no true face and index of mind but the human. It is formed and moulded to be moved by the emotions of the man, and it presents under their

influence a living picture of the heart in such a manner as to awaken other hearts to a fellowship with the feeling it embodies. Face answers face like a mirror. Sympathetically responding to the spirit breathing in the looks of friendship and love, the face expresses a language beyond words; and thus man learns the depth of many meanings which the soul no otherwise could utter. We watch the play of thought upon the face, as of a spirit breathing on the waters, as of a light that animates its every movement, and makes it as plastic to the moving spirit as matter is to life. What eye but man's speaks thought, or looks into another's eye for the touch of intelligence, feeling, and desire? When with kindled heart, and fascinated with the resplendent and respondent face of our cordial friend, lit up and glorified with the light of love and intellect, and beaming with good-will, we feel what is meant by 'the human face divine,' and own before that look no dim relationship with meaner beings that possess neither means nor mind for any fellowship with spirit. An ape may grin but he cannot smile, and laughter is unknown except with reason: that alone is conscious of the true. the ludicrous, the ridiculous, the incongruous, the comical, the witty.

Need we anatomise the *brain* of our friend to settle any question in our mind as to how far the organ, through which his will is impressed and his thought operates, corresponds in its measure and proportions with that of apes and monkeys? Must we dissect his *cerebrum* and *cerebellum*, and take the dimensions of

his hippocampus minor and posterior cornu, or analyse the whole brain to determine how much fat and phosphorus it contains, in order to determine the nature of our friend's affections and the place he is fit to occupy among animals? We may as well anatomise and analyse his hands to ascertain what they can do; for they, too, are but means and instruments through which his soul works out its will. It is not mass, it is the invisibly minute, it is the force that lies behind atoms, that constitutes essential differences, and, in forms of life, the mathematical axiom is not true, that things that are measurably equal to the same thing are equal to one another. No; we have visibly before us, in man, a being, as all true physiologists allow, evidently underived from any other known in the categories of the naturalist's library, or found recorded in the true old chronicle of rocks. And this we know without consulting them, when we look into a face enlightened with the inner sunshine of reason and of love.

Still, as so great a discordance has been produced by confounding things that differ, and so much has been made of the few general resemblances existing between the anatomy of man and that of apes, baboons, and monkeys, it will be proper to point to certain prominent and peculiar characteristics in man's bodily organisation, which in a marked manner distinguish it from that of any other creature. There is not the smallest part of any human bone which does not essentially differ in its 'make' from any corresponding bone in lower animals, and that in a degree sufficient to enable

a good anatomist to say, 'This is human.' Even the very blood-disk in man is moulded into shape by a power that makes it organically as much human as the man himself. It is characterised by vital qualities, form, proportion, action, as much as the rest of the body of which it constitutes an integral and living part; it is acted upon and acting altogether humanly in brain, lungs, and heart, as it rolls along its intricate and mazy channels. It gives and takes its life in a human manner, with a power of its own in relation to the air of heaven and the elements which form the body and regulate the very working of our thoughts.

Resemblances to the human form will, of course, necessarily arise in the anatomy of those animals which are endowed with arms and hands; the possession of these implies and requires certain other correspondencies, such as a mouth to be reached and served by the hand, and also the power of sitting at ease, with ability to stand more or less erect occasionally, because this ability is needed, in accommodation to the hand in reaching forth to seize any object, as is evinced by all those four-limbed animals that climb trees and gather fruit for the support of life. Since the ape and monkey tribes not only gather fruit, but depend for life on fruits that grow on the extremity of branches which would not sustain their weights, they are enabled by their long arms and adroit hands to accomplish what they need. But this they do the better by the additional accommodation of handy feet that grasp like hands what they stand on. They naturally approximate to the erect position only in such efforts. Their limbs are indeed admirable exemplifications of the principle observed throughout nature, namely, anatomical adaptation to the habitat, habits, and requirements of everything that lives and feels desires. baboons, and monkeys, then, necessarily more resemble man in general form than any other vertebrates, simply because their mode of feeding requires and obliges them to exercise some of the mechanical powers of man. And if there were not such creatures formed to dwell in the forests of the tropics, the richest provisions for the sustentation and enjoyment of animal life would be produced in vain; and thus an instance of mere wasteful bounty, an exception to the general order of living creation, would be found where least to be expected; for the universal rule is that, wherever the means of life are found, there also are found living creatures fitted to enjoy them. The Power that produces life produces food also, and these are proportioned to each other all the world over; food sustaining life, and life causing the growth of food.

The peculiarities of human anatomy are no less fulfilments of the general law of adaptation. Man dwells everywhere, does everything that can be done with mind and hands, and thus he rules supreme over all the earth in virtue of his intellect, as endowed with appropriate instruments. Physiologists say that man's superior brain enables him to exercise his other high corporeal endowments, and therefore there can be no strict objection to the use of the term Archencephala,

employed by Professor Owen to designate the genus Homo, because, without his quality and quantity of brain, man would lose his mastery in creation. soul that uses the human brain would be out of place and incapable of fully manifesting its individual faculties with any other kind of brain or with other limbs than those which it actuates and employs in this world.

We have heard of the discourteous dispute between the two most notable of anatomists to determine whether the hind paws of apes are to be called hands or feet. The upshot seems to be that you may choose which you like and be equally right; so, by way of compromise, and to be safe from total mistake here, we will again call them handy feet. The foot of man is, indeed, homologous with the so-called lower hand of the ape, and you may say with Professor Owen, 'it is a foot modified for grasping; but in the same sense you may also say of the human foot, it is a hand modified for walking.'* Yet of man alone it can be truly said that he, is bimanal and bipedal. If he is to be called a Primate, as Professor Huxley prefers, he is Primate No. 1, the Primate without a parallel or exact analogue. He alone has a perfect foot, a foot that properly is nothing but a foot-at least, with a boot on it. Every part of man's body is, so to say, conformed to his foot as well as his hand. But, then, why has man such a foot but for the sake of his hand, and that he may work out his wishes with that organ, which at the same time unites

^{*} See Owen, in Athenœum, Feb. 21, 1863, p. 262.

with his eye and his voice to speak the meaning of his word? As the great teacher of eloquence says, What is the first essential of eloquence? Action. What the second? Action. Thus the whole of man's body speaks the mind that animates it. In short, there is no schism in the body of man, for it is constructed to one end—that he may employ his hands as instruments of reason and free-will; as the instruments of the mind, ready and able to do all that reason demands. To indicate is to suggest a fact and a process of reasoning concerning it: a motion of the hand is made to express an operation of the intellect. Why? Man points. Can any ape do that? No; there is not a creature but man that has a true index finger, or a muscle adapted to the purpose of directing it as in pointing, or a mind to prompt or need that movement. Hand and reason, brain and social thought, co-operate in that act, and therefore brutes cannot point; but man lives with a feeling of mental fellowship and meaning at the very tips of his fingers, which obliges him to raise his first and foremost digit whenever, animated with the energy of his own heart, he would direct attention to any object of sight, or even to God Himself, as an object of thought dwelling for The outward form of an ever in the infinite above. organ does not indicate all its functions, and a monkey with four fingers and a thumb neither thinks, nor works, nor voluntarily conveys an idea to his neighbour by any movement of his limbs. The limbs and the senses act in man with the brain, and the brain with the soulpower behind it or within it; but as the brain, limbs,

senses, do not constitute the individual ego or soul, so the brain, senses, limbs, cannot act consentaneously but in obedience to the soul which receives impression and exercises will. The soul neither wholly rules the body nor the body the soul; they work together, and that in relation to the conditions of the outward world, being timed and proportioned in their actions to each other, because they are made to correspond by the Hand that fashioned both and wedded them together.

The whole of geometry has been said to be in the hand: every movement of the body must be adjusted to the actions of this instrument. But yet, perhaps the best type of man's mental control and freedom is seen in the perfect foot, with its wondrous arches and complicated masonry; how firm it is, but yet it is hinged and lubricated so nicely, that while more elastic, quick, and 'fantastic' in its living evolutions than the tortuous serpent, it still forms the ever-accommodating basis on which the whole body moves in all the marvellous changes of its centre. It gives liberty to the hand and the whole body to act in harmony with thought and will. It enables man to stand and face his work. It empowers him to preserve his erectness and his balance in spite of gravitation, whether, like the gymnast, he walks on a slack wire or treads with even step the varying surface of the uneven It permits him to assume whatever attitude ground. and action may serve to express his will and accomplish his intentions. Thus, the foot mainly and most practically is called into exercise in every effort of man to acquire intimacy with God's work, and to apply his

knowledge to the purposes of life, or in the advancement of art and science. Substitute any other modification of foot for that of man and he would at once be crippled in all his operative energies. We need no especial comparisons between the foot of man and that of the gorilla, if he has one, to prove that the mere anatomical analogies between them avail nothing towards demonstrating a family relationship between these nominal primates. Our toes, indeed, are fingers of a sort to accommodate the foot to the inequalities of the ground, and by practice they may be helps even to handicraft, but they are not formed for holding, as in the gorilla. Hence, the flexor pollicis pedis, the muscle that pulls upon the great-toe in walking, is, when normal, wholly directed to the work of that toe; the weight of the body resting on it as we take our steps. But this muscle, in the gorilla and other apes, has tendons which act also on the other toes that they may act together, after the manner of the thumb and fingers, as in the act of climbing and grasping. The pollex of the ape's foot is a real thumb, acted on by muscles that enable the animal to use this thumb antagonistically to the other digits, nearly as our thumbs act with our fingers, so as to grasp and to secure a firm hold in climbing trees and passing from branch to branch.

Now, having looked at man's face, hands, and feet, let us look at his teeth, for the dentition is largely considered in the classification of animals. The teeth of man belong to discourse of reason as much as to the digestive process. They separate our vowels quite as

freely as our viands. Why has man no tusks among his teeth? Simply because man is a cooking animal, and his teeth are not intended merely to rend and crush, but are as much subservient to speech and beauty as to mastication. He feasts rather than feeds, at least where reason reigns. Hence, the culinary art has been deemed a sufficient distinction between man, who in what he does almost always employs art, and the brute who has none. There is scarcely a tribe of men so idiotic or so degraded as not to produce and employ fire to warm themselves, and for the preparation of food. Even the earliest Scandinavians, if we may judge from their immense kitchen-heaps, cooked their meals of shell-fish and were social in their enjoyment; and the dental economy of all the southern savages amidst the prodigality of Nature's provision, was considered in their cookery and feastings. Man, in short, does not eat merely to satisfy appetite, but also to promote fellowship and good feeling under circumstances in which animals only snarl at each other and devour for their lives.

Not that we would dare place man's bodily appetites out of the category of animal relationships. Our bodies are under a covenant which includes all the beasts of the field. Our corporeal framework is moved by instincts more or less common to all animals, and, without reflection on duty, the human mother would be instinctively impelled to protect and provide for her babe. She is thus much in sympathy with every creature on whom is impressed a feeling of involuntary affection

for its young. But, under the perversions of her moral nature, her supernatural will may, and often does, extinguish the parental instinct, and cause her to calculate on the chances of concealing infanticide that she may persist in selfish iniquity and profane her nature. The law of nature bids the mother yield the last life-pulse of her heart for her offspring, and there is scarcely a creature that will not starve rather than deprive its young of its food. The parental instinct, while it is the most benevolent, is also the most powerful influence in the world. It corresponds with the love that formed the mother's breast and opened a fountain of nourishment to accommodate the toothless infant. He who would wisely study the teeth in relation to food and to speech, would learn much of the connection between divine wisdom and human love.

If we compare the brain of man with that of any lower creature, we shall see that Professor Owen had good reason for regarding man as the Archencephala, that is, a being that overrules others through the superior capacity of his brain. In this respect, as in all others, man, even in his lowest tribal conditions, claims a right to be considered as 'the apex of the earthly hierarchy.' We may not be able to assert in a demonstrative manner, that the brain of man possesses characteristics altogether distinct from any possessed by the brain of any other creature. There is no reason why we should look for such marked distinction in evident anatomy, kind and quality of brain, for the human brain has doubtless many of the same offices to

perform in relation to the body as the brains of all other creatures with five senses and four limbs.

If we would compare the brains of creatures with a view to ascertain by that means what they can do, we find only that the fitness of a creature to do this or that is not determined by the brain, but by the whole structure of the creature. And many an insect, without any demonstrable cerebrum, is wiser in its generation than any of the most anthropoid apes. As all the actions of man and all his perceptions are connected with brain functions, he needs a corresponding brain to work with that he may impersonate and present himself by his activities. But the human brain is improvable for mind purposes by proper usage induced by desire to know and do what is right morally and socially. this no other brain is capable, and many a human brain is restricted to a small education, while the soul of the idiot lies latent or slumbering in a dream, perhaps to awaken to the larger capacity hereafter. It requires something more human than a mass of nerve-matter in the form of a brain to produce manly ideas, however necessary a good cerebrum may be for their manifestation in bodily action. It is not in the fibrillæ, nor in the corpuscules of the brain, that ideas dwell, but in the conscious being that wills and moves in humanly association. Doubtless, with regard to the use of the outward senses and the voluntary movements of the muscular system the mind has no other medium of impression or of action in this world than the brain; but to talk of that organ as the origin of mind as well as the medium of mind-action is to confound the agent with its instrument or the seer with the means of sight. Outward agencies are constituted severally to impress the organs of sense to produce sensation through the medium of the brain, but neither the brain nor the sense can be the *percipient* of the sensation; that is only the being that feels, thinks, and wills, which we dare not predicate as pertaining to any arrangement of matter.

Yet if the brain be the seat of that action which renders ideas operative agencies in relation to voluntary movements, we should expect a greater development of that part of the human brain which physiologists assure us is most active in ideation. Accordingly, we find the cerebral hemispheres in man higher, wider, and longer, by far, than in the most manlike apes—the orang-utan and the gorilla. The posterior part of the human cerebrum is so peculiarly developed that it has acquired the name of the third lobe of the brain, and is said by Owen to be found only in man.* This, however, may well be questioned.

We have no occasion to go into the discussion concerning that part of the brain called the *hippocampus minor*, which has provoked something of a temper among gentlemen of equal anatomical skill, that somewhat detracts from the supposed influence of science and natural philosophy to regulate the mind. It is enough for our purpose that all authorities in this matter agree in deciding that the human is the completest

^{*} Owen's Classif. Mammal., p. 26.

brain in existence; and that the human skull is in keeping with the human brain, being the less like the brutes in proportion to the excellence of the brain which occupies it; in short, every characteristic of humanity is so far a removal from what is brutal.

The human head is balanced on the vertebral column-not hung on and suspended to the neck, as it were, by the help of an especial elastic ligament (ligamentum nuchæ), as in all four-footed and prone animals, and without which they would require another arrangement and power of muscle to raise up and sustain their heads, which are elevated by the elastic ligaments of their necks. Quadrupeds have muscles to depress their heads, but their heads are raised by springs running along grooves in the neck-bones. Thus, unlike man's, the muscles of the neck work with their wills, so as to bring the mouth into contact with their food, since they have no hands or other means to bring the food to the mouth, and for other purposes subservient to the sustenance of life. Apes and monkeys have hand-like paws to gather and convey their food to their mouths; and therefore in them, of course, the spinal column approximates more nearly to the curve assumed in that of man. Their heads are not so completely hung on their necks as in grazing animals, for instance; but yet their skulls are not as in man balanced upon the spinal column, and therefore they need especial ligaments to assist in adjusting their movements.

The human spine is properly called a column,

because, though it is not straight, it is built of parts or joints laid one upon the other like the blocks of a natural basaltic column. It is curved into the very line of beauty as drawn by Hogarth, and by a wonderful mechanism is so constructed as to be both elastic and firm, according to the action of the numerous muscles attached to it, and which in their co-operation preserve the erect attitude as in walking, or bend it to any degree convenient in sitting and stooping. In every position, the adjustment of the head to the vertebral column, in consequence of the manner in which it is attached to the neck, is the admiration alike of the anatomist and the mechanist. It is true that birds are bipeds like ourselves, with wings instead of arms and hands. Penguins may sit as erect as we -that is the position of their repose; man alone is erect in his activities, he alone truly stands upright, with the centre of gravity in a line perpendicular from the crown of his head through the middle of the oblique arch-his foot.

With regard to the varieties existing in the shapes, sizes, and proportions in the heads of different races, we must beware of being led away by the large attempts at generalisation which distinguish some lecturers on craniology and assumed science in general. Without a single fact which would enable them accurately to determine the influence of habit of mind and physical circumstances on the development of the skull, they assert not only different centres of creation for the different so-called races of men because of the variety

in their skulls, but they also imply, if they do not assert, that the varied types originated from different antecedent races of apes. To such reasoners it is enough to reply, first be sure of your facts, and then be sure you know how to read them.

The difference between the base of the human skull and that of the gorilla or the orang-utan is very marked. Erect the backbone of the gorilla, and try to balance the gorilla's skull upon it at the proper joint, and you fail. You see the reason why. joint-surfaces of the neck and the skull correspond perfectly, as in man; but those surfaces in the gorilla's skull are not in the line of the centre of gravity as in man, they are more like those of brutes that walk with face and mouth prone to the earth. The zygomatic processes, or cheek-arches, bulging out from the sides of the ape's skull also more resemble those of a beast of prey, because the muscles which pass under those arches and act on the jaws require to be large and powerful, in keeping with the work which those formidable jaws have to accomplish in crushing for food the hardest nuts of the tropical forests.

To whatever part of man's body we look, we shall see, if rightly considered, that the human framework is not constructed merely for animal purposes, but also to subserve reason, which overrules the animal propensities with motives not derived from the body. Animals are governed by their bodies, but man by his mind. He uses the body for ends not belonging to the body. Art, science, philosophy, religion, distinguish man,

because he can regulate his will for purposes peculiar to himself. Animals have no will but that which relates to the wants of the body. How, then, can man have sprung from any animal? The source of humanity must be higher than itself. Therefore, whereever human nature asserts its prerogative of reason, it bids man face the heavens in prayer, or at least with an onward and upward endeavour and desire towards the origin of reason. Man cannot think of himself without looking off beyond the horizon which bounds his bodily vision. And when taught to look towards his Source, there is that within which tells him that earth is but a stepping-stone to a higher world.

Organisation is the instrument of reason in man, and cannot be the cause of that which employs it. And 'if organs are common to man and to brute, one is necessarily forced to the conclusion that intelligence is not inherently attached to organs, but that it depends on another principle—et que Dieu sous les mêmes apparences a pu cacher divers trésors.'*

We may pursue the zoological method with brain, bone, teeth, blood, muscle, and define man as a mammal of the pectoral order; but, after all, we thus miss the man himself, and at the best have only classified his body. Mind makes the man; and we must return to the first words of Linnæus, under the head *Homo*: Nosce te ipsum—know thyself, O man. That, indeed,

^{*} Bossuet, De la Connaissance de Dieu et de soi-même, cap. v. xiii.

includes not only all we can learn from the revelations of time, but from those of eternity also; that is to say, if man be immortal, which he must be, or his desires are beyond his destiny and he is only an incongruous being, created with the promise of a purpose never to be fulfilled.

CHAPTER III.

THE HYPOTHETICAL GENESIS OF MAN.

HAVING considered the bearing of man's bodily likeness and unlikeness to apes and other animals, let us now proceed to enquire how far the theories of life, either new or old, will assist us to form a conception of the origin and standing-place of the first man.

Though looking with reverence and awe at the lowest creatures, and, in a sense, feeling ready to say with Job-'Thou O worm art my mother;' and truly, moreover, being linked to the relationship by much of conformation, and by necessities in common; with the consciousness, too, that the touch of Omnipotence is ever evident alike in the flesh and life of maggots and of men—one may yet find it not the less unpleasant to be told we are derived in a direct line even from apes. Indeed, if we may believe those who pretend to have seen traces of genealogy so far back, it appears that if our real origin be sought, we-identity being involved in the continuity—we ourselves can be no other than mere developments of reptilian or some earlier spawn, and might have become toads or other slimy coldblooded creatures, but for circumstances that diverted

our tendencies in that line, and produced a greater enormity of deviation from the pristine type of creepers and crawlers by wriggling us into being as men and women. We must not complain, however, that our reason is offended at such information lest our reason itself should be suspected; but really we require a good amount of some sort of philosophy not to laugh when told that a duck, for instance, was not expressly intended to be a duck with a web-foot, that it might pleasantly move on the water, but that its forefathers and mothers a long way back began under pressing circumstances to get a duckish disposition, and by dint of endeavour for ages to try their chance of paddling themselves about on the pools of a puddly world their efforts were at length quite rewarded and resulted in a complete success—so remarkable, indeed, at last, that a generation sprang from them thoroughly equipped for the waters with web-feet, oily backs, boat-shaped bodies, spoony bills, and bowels to correspond with mudworms and duckweed.

Thus, also, it is said that polar bears of peculiar make pawed about in the arctic seas, catching shrimps and jelly-fish, until their coarse hairy coats turned into a kind of seal-skin, and their whole economy at length was reduced to, or produced in, the form of a kind of walrus, and then a whale, so that train-oil and blubber are but developments of bear's grease. There was nothing abrupt or startling in those changes, they were so very, very slow; which of course arose from the struggle to determine amongst the existing tendencies

whether it were better to go on as before, or to take a new turn. But habits, however chronic, in the matter of originating species by selection, are never confirmed by duration, but may be changed for new ones on special occasions, and under the force of urgent circumstances, if time enough be provided and there be nothing to signify in the way. The change, however, must be slow, whatever the urgency. Do we not see, in short, such a gradation in the scale of living existences, special neighbours being so nearly alike that to distinguish which from which would puzzle even an anatomical Solomon? And therefore it is no wonder if they do not know themselves and run into each other from this end of the system to that—if there be any system—till a place in nature for one creature more than another is nowhere, and the whole world is all variation from this to that, and back again.

Every kind of living creature was evolved, if not hatched, from one kind of egg; or rather there are no kinds of creatures and no kinds of eggs: only this became that, or that this, as it might be, in consequence of the 'innate tendency' of this and that to vary its mood and mode of life. How anything happened to be endowed with an 'innate tendency' to become something else does not appear; and how nature should have a course without a fixed channel to run in, the variational theory wots not. It is the child's question in the mouth of the philosopher—which was first, the egg or the hen? as if there were any eggs but from creatures to produce them. But things are not

unreasonable because ignorant people think so; and therefore, peradventure, if we had but an 'innate tendency' to increase our knowledge of facts, we should perceive the beauty and truth of the theory that deduces all forms of life from one original germ. We only beg the propounders of this notion, which they call a theory, to supply us with the required facts, since we have been taught that theories are always supposed to be founded on facts, and can have no foundation if, as in this case, the facts at present exist only in fancy. Let us see an instance of a tendency to variation producing a new species, and let us look at a germ that had not a parent, ere we believe.

Oken declares his belief that neither man nor any other animal was created, but merely developed from an organic point or vesicle, infusorial or otherwise, and so microscopic that he does not profess to have seen it nor its immediate product.*

Lamarck, in like manner, contends that all living things sprang from a solitary homogeneous jelly that got alive by the forces of involuntary agencies, and took to organising themselves with an 'innate tendency' to perfection—the perfection of what not being stated. The upshot of Lamarck's hypothesis is clearly expressed by Lyell: 'It is not the organs or, in other words, the nature and form of the parts of the body of an animal which have given rise to its habits and particular faculties, but, on the contrary, its habits, its manner of

^{*} Oken's Physio-Philosophy, Ray Soc. Trans., sect. 920-960.

living, and that of its progenitors, have, in the course of time, determined the form of its body, the number and condition of its organs, in fact, the faculties which it enjoys.'* How Lamarck came to enjoy the reputation of being sane, if this be his view of life, is surprising. But perhaps he has somewhere proved how an animal and its progenitors enjoyed their manner of living, and used their faculties and formed their habits, without bodies of determined form, already possessed of parts and organs in due number and condition. not faculties, functions, and organs coincident? Who ever heard, except from Lamarck, of a manner of life without any manner of body to live in? habits of a parent may and do affect the condition of the offspring, all men know; but it was never suspected that a man, however bad, produced anything but a depraved human being, not a bad monkey, any more than that a bad horse could produce a bad donkey. The propagation of disorder is one thing, the production of a new kind of being quite another.

Darwin, with the insight of a masterly naturalist, asserts the probability that an 'organic molecule,' having 'life breathed into it,' was the original of every variety of life, each variety being imbued with 'an innate tendency to variability.' He does not suggest how the organised molecule came to exist before life was breathed into it, nor how an 'innate tendency to variability' comports with fixed laws, and the fact that the

^{*} Lyell's Principles of Geology, 2nd edit., p. 471.

offspring of any creature is more like its parents than like any other beings.

We see that Oken, Lamarck, and Darwin, mean much the same thing, namely, that there was no creation of various kinds of animated beings, but that all the kinds now existing developed themselves according to the innate tendency to variability in them, together with outward conditions, also of course tending to vary. All this variability and power of development was, it appears, included in the original germinal vesicule or organic molecule, that got life without specific derivation, and produced offspring with such a tendency to variability as to generate every kind of organised thing in the world, with a greater tendency to continue their kind than to vary. This is a very remarkable kind of philosophy, the germ of which is nonsense, betraying its origin in all the variations of its development. We need not refer to the facts on which the hypothesis is founded. They do not exist, or are only imaginary, since none of the naturalists have ever seen any creature in transitu from one class to another, notwithstanding all the innate tendency to vary and change from one to another supposed to be for ever going on, according to theory.

The original germ, organised molecule, or vitalised vesicle, however, will afford us a fixed point to start from in our further enquiry. As there is nothing in the order of nature, if there be order, as far as these expounders of nature have informed us, to prevent our finding a specimen, let us look for it. Alas! we look

in vain; all germinal vesicles that we know of are appropriated to some kind of animal life. Are we to conclude, therefore, that there never was more than one primordial form of germinal molecule, vesicle, or whatever among the numerous names applied to this imagined primordial we may choose? And then, are we to understand that this form was immediately lost in the process of infinite evolutions into all forms? We presume so, since the best naturalists in the world, and even Darwin himself, fail to point out where a created germ may be found. How is this? Simply because all germs, as far as can be discovered, are eggs, seeds, buds, offshoots of some kind, and therefore not as such created, being in fact only produced by procreation or its substitute, and in each case becoming developed, as far as can be proved, not into this or that, but always into the likeness, however varied, of the parents from which they proceeded. Is not this a reasonable objection to the Darwinian theory? And are we not warranted in concluding that as germs are never found without parents, that parents were first created or produced and not germs? The difficulty of conceiving creation arises from what we see. When we look at man's body in its perfection now, we see that it has passed through stages of development in every part of Time is now written in bone, blood, its structure. flesh, tooth, hair, and nail. Was man created with the same marks of time in his perfect body? Yes, for the perfection of the whole is the perfection of its parts. He who created each atom of the body perfect, created

the whole. The act of will which produced plant, fish, bird, beast, and man, bearing germinal principles in them, needed no germ from which to develope a perfect man, though he was, doubtless, as if developed, because perfect development means only the perfection of each part as if it so grew. And it is this idea of growth with which we associate time, but the act of Divine Will is not dependent on time, though to will existence, and to produce it, is to include time as an element in what is caused to exist, for every body or organisation must have relation and proportion to the movements and forces existing around it.

Professor Huxley advances what is certainly indisputable, so far as his anatomy teaches. He argues. first, that man, like other animals, is developed from an ovum or germinal cell; secondly, that there is a considerable resemblance between the anatomy of the ape and that of man. So far we agree; but the next step in Professor's Huxley's argument is an immense leap, in which we cannot follow him, for he says the 'one immediate conclusion' from these premises is, that there are no grounds for placing man in a distinct order from the apes; in short, we do see rational ground for doubting his conclusion, 'that man might have originated, in the one case, by the gradual modification of a manlike ape, or, in the other case, as a ramification of the same primitive stock as those apes.'* Mr. Huxley acknowledges 'that, brought face to face with these

^{*} Man's Place in Nature, p. 103.

blurred copies of himself, the least thoughtful of men is conscious of a certain shock.' So far, it appears, we sympathise with each other; but why should apes be called blurred copies of man, rather than man a blurred copy of an ape? We should like to know. If either be the copy of the other, man, who came in last, is entitled to the distinction. But this idea of blurs in nature's work is not very suggestive of the wisdom of the mind that believes in it, though very consistent indeed with the theory that confounds man with monkeys as derived from the same stock.

There is nothing new in Professor Huxley's Natural History of the Man-like Apes,* so far as the manlikeness is concerned; for since apes were first seen, their rough outline of resemblance to man was always recognised; and of their general anatomical likeness there has been no question since Galen dissected them. But the actual blood-relationship of man to the ape is a modern discovery, which was needed on the Darwinian or revived Monboddo hypothesis, but which is really of little value for want of 'the missing link' in the genealogy. 'There are no intermediate species, no connecting links.'† As reason demands, so it is. There is a continuity in each family; new types do not displace old types; no complete chain can be traced. As Professor Phillips observes, 'No possible art or arrangement can present plants and animals in one continuous

^{*} Man's Place in Nature, Essay i.

[†] Miller's Testimony of the Rocks.

series from a lower to a higher type.'* After all, then, the family connection cannot be traced, and no one has a right to look into a man's face and say he sees the relationship in the likeness and expression. The man should smile if he did so, and ask him if he ever saw an ape smile? In fact, if an ape may be said to have a face, it is of too serious a turn to be capable of expressing a thought, and a simial smile is an impossible accomplishment, because it implies a sense either of human folly or of human sentiment, of which apenature betrays no sign. If it plays it never laughs; though it might well grin if it could fancy itself compared to such a poor prying creature as a man claiming to be descended from the apes.

The desires of a creature are, as a rule, coincident with its power of gratifying them; and whatever mode of life a creature is adapted to enjoy is naturally that in which it is placed at its birth. The whole world is planned as if to accommodate the greatest possible variety of animal life, and enjoyment is the normal state of every sentient being. Now, if there are forests of trees in the world bearing hard fruit fit for food to such creatures as may be gifted with rude hands and hand-like feet to climb the trees, and with strong teeth and jaws to crush that hard, nutty fruit, then we should expect to find such creatures in such forests to enjoy them. Gorillas, chimpanzees, and orangs are precisely formed for their habitat and habits. But we see not

^{*} Address as President of the Geological Society, Feb. 17, 1860.

how they could be so without, as vertebrate animals, bearing a rather close anatomical resemblance to man, who also has the power of climbing and clutching, though with difficulty. The apes enjoy their life in their place, and death is a nonentity to them, as to every living creature but man, the dignity of whose nature is evinced by the power of fearing death as an idea, and yet of viewing it as but a step to a higher status. Our dignity is not diminished, nor our logic dimmed, by acknowledging our physical adaptation to a physical world, though indeed, by so doing, we claim for our bodies an outside likeness to certain other vertebrates. We, however, claim all this world and a world beyond as our habitat, and with hands that answer to our reason, and holding all geometry in their grasp, we fashion instruments with which to rule the elements; and penetrate with reasonable insight into the far heavens. Bones and muscles are not man. We are souls deriving ideas from sympathy with sages that lived before us thousands of years gone by rather than from our mere senses. We are persons, and neither things nor mere animals. And when we ask why our bodily limbs are somewhat like an ape's, we safely say because we want them for purposes proper to limbs; but the skeleton does not include our character, for we feel ourselves in some degree aspiring to know more of the Person who made us persons. And how can Huxley or Darwin assert that man might be a ramification of the same primitive stock as apes, if these can never be taught to think and act as personal beings? And

how can we suppose that the first man, while worshipping his Creator, accounted for his own existence and his position on either the hypothesis of Oken or of Darwin?

'Man,' says Oken, 'is a child of the warm and shallow parts of the sea.' This is dogma No. 1. then adds in the next sentence a qualifying doubt, 'Possibly on one spot, and that the highest mountain of India.' Was the warm and shallow part of the sea there? 'Possibly,' he continues, 'only one favourable moment was granted in which men could arise.'- 'They were littoral inhabitants, and without doubt [dogma No. 2] carniverous, as savages still are.' could they have obtained fruits, cabbage, and turnips? The first men, then, were savages, according to dogma No. 2. But amidst the possibilities, possibly the Creator of man did not need the help of warm water to make a man; and possibly he could provide for him without making him a carniverous savage. Oken wanted the warm shallow sea, because he wanted some unknown sea-mucus as the human germ. He proceeds with his dogmata thus: 'As the human body has been formed by the extreme separation of the mucous mass, so must the human mind be a separation, a memberment of infusorial sensation.'* These words are intended to convey their own meaning, but what that meaning is *the reader must discover for himself. But their meaning in relation to man is as plain as that of the words

^{*} Oken's Physio-Philosophy, Ray Soc. Trans.

employed by Oken to define science, and, scientifically (may we say, impiously?), God Himself. This philosopher tells us that 'there is no other science than that which treats of nothing.' 'Mathematics is based upon nothing, and arises out of nothing' (as we see in his work). Then 'The Eternal is the nothing of of nature.' 'Man is God wholly manifested,' and yet 'God manifesting is an infinite sphere,' and 'the world is God rotating.' Truly Oken's theory of existence is, like his own mathematics, 'based upon nothing,' and may be summed up in Horace Smith's imitation of Byron,

And nought is everything, and everything is nought.

When we accept Oken's hypothesis, or any other concerning sea-mucus and germinal vesicles as the origin of man, we have a certain difficulty to overcome not altogether dependent on climate. We may suppose the primordial mucus or the stray vesicle, brought by whatever water-power we please, and deposited in an appropriate spot, say among the Himalayas, which name, by-the-bye, means the snowy region, and therefore, perhaps, not the most suitable for the incubation of an unborn life. But somewhere let there be the said mucus, turning into man by virtue of sunbeams and slush, the difficulty is this: How came it that another mass of sea-mucus happened to be thereabout just at that time, which mucus turned into a woman as a match for the man? Our philosophical instructor obligingly leaves us to the mercy of our imagination

to account for that singular coincidence in the movements of mucus, only suggesting that if we could ask the first man and woman, as thus originated, where they came from and how they came to be what they are, the only answer we should get from either of them would be that of Topsy—'I 'spects I growed.' A very respectable reply from a being sprung only from mucus. Mr. Darwin's faith is modified differently; he says, 'I believe that animals have descended from at most only four or five progenitors, and plants from an equal or lesser number.'* This is pure and simple faith with which reason has nothing to do, and is not sustained by an approach to a single fact. But he advances to reason immediately after, and kindly adds: 'I should infer from analogy, that probably all the organic beings that have ever lived on this earth have descended from some primordial form, into which life was breathed by the Creator.'† Mr. Darwin says, somewhat exultingly: 'There is a grandeur in this view of life, with its several powers having been breathed by the Creator into a few forms, or one.' There is, doubtless, necessarily a grandeur in any conception of creative Power calling forth the wondrous world we live in, but the grandeur is not lessened by conceiving that Power as making every living thing according to its kind with the might of a single fiat. Mr. Darwin states the analogy: 'Their chemical composition, their germinal vesicles, their cellular structure, and their laws of growth and

^{*} Origin of Species, 2d edit., p. 484.

[†] *Ibid.*, p. 484.

reproduction.'* Whence did Mr. Darwin borrow the notion that life was breathed by the Creator into some form prepared to receive it? Who prepared the form? And why was only one form prepared, if many sorts of lives were to be inspired? Was one form easier to make than many? Life breathed into some form! Does Mr. Darwin know of any organic form not preceded by life? Surely there are as many lives breathed as there are living forms. Did the primordial form inspire all the rest? 'Some primordial form into which life was breathed by the Creator' does not come into the analogy; the Creator's breath is beyond that. and is as necessary for all forms of life as for any one. Belief in the Creator as breathing life into dead matter is something above science, and happily is more unavoidable than any theory concerning the origin of species or appearances. That belief in the creative Spirit inspiring life is not a deduction from reason, but a response to reason in a revelation.

Given the aforesaid analogy in the chemical composition of man's body, the germinal vesicle from which it now springs, the cellular structure of its several parts, the laws of its growth and reproduction, what is the analogy in the results? The consequences are not the same, and the causes must be different. Whatever the analogy, there is something behind appearances that works out an immense dissimilarity, so that something is not so analogous. There is in every variety of

^{*} Origin of Species, p. 484.

creature a difference more striking than the analogy. In all the respects named each creature follows a law of its own, in time, order, proportion, by the operation of which it happens that Mr. Darwin cannot discover a single approximation to an instance in which one order of living creature produces another order. Should he not, therefore, have inferred that the Creator breathed life into many primordial forms, and thus instituted from the first an essential difference between a man and a monkey, a monad and a mammoth, a bird and a beast, both in the germinal vesicle and the individual power working therein, to its full development? For who ever heard of the germ produced by one creature being evolved into the likeness of another-who, for instance, ever heard of even a toad coming forth from the spawn of a frog? A certain goose, indeed, used, in the imagination of our forefathers, to come from the barnacle; but science now brings the goose from the goose egg and nothing else-not even a duck's. If a germinal vesicle is, as far as we know, a germ always of a specific kind of creature, and never of any other, however analogous, what is there in the simple analogy that all germs are germs to lead a rational man to infer that all kinds of creatures originated in some one particular kind of germinal vesicle? There is something unpleasantly vague, if not purposely deceptive, in the assertion of a general analogy after the Darwinian manner. There is a chemical analogy between flesh and some of the most active poisons, but that is no reason why poison should become food. All things in

the world are either dead or alive, organised or inorganic. There is a general analogy between all forms of life so far as they are all alive. That is no reason that one form of life should be transformable into another. There is a general analogy between all inorganic things, but no one dead substance can be transmuted into another. Everything, either organic or inorganic, is governed by some power behind the thing itself. As chemical affinity overrules all the combinations of dead matter, so life overrules chemical affinities, and thus constructs out of the elements an organisation appropriate to each varied form of life; but we cannot predicate what shall be the form of organisation to be assumed because we know the names of the elements employed in all organisation. That is determined, not by the analogy in the elements, but by something predetermined in the kind of life that shall appropriate them in building up a structure suited to that life. There is some defining power working antecedently to the germinal vesicle itself, which not only forms that vesicle, but so operates in it as to cause that vesicle, under favourable conditions, to be properly. developed only into a resemblance of the parent. If by any cause it fail to assume that form, it fails in totoit does not turn into another kind of perfect creature. General analogies only mislead, unless we consider the particulars which constitute differences. What reason is there in the conclusion that because all life is now evolved from eggs, therefore all eggs sprang from one egg? or because all seeds are eggs, therefore all eggs and all seeds are due to the same primordial form?

There has been a creation, or there has not. If there has, order itself was created-order in the relation of one thing to another and all things in their places from the first. If there has not been a creation of mutual relations, then mental and physical existence, consistent in order, because consisting in differences, is not only marvellous, but a marvel without a cause. If not made by the creative fiat, seeing that it now exists, it must have made itself, which is not only a miracle but a stupendous contradiction, not to be reconciled even by Omnipotence, and therefore not to be received as a truth by any faith that consists with reason. Because nature is created consistently, we can reason consistently concerning it; but if this may become that, we have no ground on which to reason.

If there has been a creation, it resulted from Omnipotent Will; and if what we witness in nature is created, then all the various orders of life are created; and the vertebrate animals are not derived either from mollusks or insects, nor from any germ that under any circumstances might have become either insect, bird, beast, fish, or worm. The power that created the germ also created the circumstances of its development. But Mr. Darwin's hypothesis of a primordial form denies the direct creation of distinct orders of living beings, and requires that primordial breathing form to be the parent of all the different forms of life from mites to men. But how he accounts for successions of kinds on this

hypothesis does not yet appear, and never will, since we know of no world consistent with the hypothesis, and cannot expect to see one created to prove the possibility of its truth.

Mr. Darwin mentions 'the laws of growth and reproduction.' Are those laws fixed or variable? If variable, what law governs their changes? And is that which governs variations itself variable? If so, is anything fixed by a law? And is that a law which is not invariable in relation to that of which it is a law? The answers to these questions are not supplied in Mr. Darwin's writings, but they are supplied both by science and common sense. All the differences maintained in this world are maintained by natural laws, which are unalterable except by the Will that imposed them; and to alter creation is to create anew. Mr. Darwin's hypothesis is worth nothing, unless it shows when those laws began to act. If so rare and ripe a naturalist cannot prove that 'the laws of growth and reproduction' have been introduced of late, or within his knowledge. or of somebody's knowledge, we had better believe the reason we have than his hypothesis, and conclude that natural laws began with the creation of nature, because nature could not be without laws.

Some beginning there certainly was to the laws by which men and animals grow and are reproduced. The formation and reproduction of creatures according to their kind is proof sufficient of a fixed law operating to the production of that effect at some period. And if those laws have not operated from the first, so as to

continue in all their analogies and differences productive of the same effects, then the same causes have produced other consequences, which is absurd. It is vain to look for any facts in creation that shall contradict reason, for reason, as far as we can discover, exists for no other purpose but that of discerning God's works, and corresponding with God in His works, by learning from them, reasoning from laws of nature to the Maker of those laws.

The theory of development as propounded in the Vestiges of a Natural History of Creation, is not very different from the Darwinian theory, or rather hypothesis; it, too, suggests supposed possibilities, rather than explains facts. 'The inherent qualities' and 'modes of action depending solely on organisation,' 'without immediate superintending power,' suit one hypothesis as well as the other. The Vestiges supposes 'two local origins for the human race necessary-namely, one for the Asiatic, American, and European varieties, and another for the African. The former seems to be connected with the great development of the quadrumana in Southern Asia, the latter with that of Western Africa.** Thus development and natural selections provide for each other what seems and what is necessary as above; but where the necessary and the seeming are as undefined as the outline of a fog, we cannot say which is which, the seeming or the necessary. There is one other theory imported from the South Seas, quite

^{*} Vestiges, 6th edit., p. 385.

in keeping in point of fact with either of the foregoing theories. The wise among the natives of Tahiti say that a heap of vegetables, in the act of rotting, gave rise to a number of worms, and out of those worms men and women were at length developed.* This is a very good theory as theories now go. It is quite worthy of Aristotle, who affirms pretty much the same thing of the first man.† But the Tahitian theory has, moreover, the advantage of being sustained by tradition if not by fact, and that is better than theory without either fact or tradition. Perhaps, however, we ought to view the matter as a mythical teaching of the true philosophy that vegetables support the life of lower animals, and that these support men. We cannot too freely rejoice with all that lives. If man rightly understands his place, he feels along every line of life; and all the enjoyment in nature is joy for man. Let us sing with the birds and skip with the lambs; let us shout for gladness of heart as the trees clap their hands in the sunshine and the breath of heaven. The more we rejoice with the light and the play of all life, the more we shall love one another. Though we may not, like Francis of Assisi, claim birds and beasts as our brothers and sisters, we may own them with love as our fellow-creatures, and tenderly use them in awe of the Hand that formed them. We may call on all the powers of earth and all the hosts of heaven with us to praise their Maker. But we

^{*} See Latham's Varieties of Man-Tahitian.

[†] Aristotle says men crawled out as worms, or came out as from eggs — De Gen. An., lib. iii. cap. ult.

will not confound ourselves with brute natures, either in origin or end; for is it not to man alone to whom is given the soul to say and sing *Halleluiah*?

The notion that all living things sprang from a single primitive living germ is as if a tree of infinite ramification and extent had been developed from one seed, utterly unlike any it bore. The branches, moreover, instead of being supposed all of one nature, are assumed to have taken on themselves distinct and independent powers. so as to produce ever-diverging variations in every added spray to the utmost sprig. Thus, in consequence of some undefined native conatus in each new variation, the grand tree of life bears a totally different fruit on each branch, the things in common being only life and its concomitant organisation. And then again, the lifeendeavour, proceeding along the varied collateral and off-set lines, is supposed to operate in such a manner that in one direction the result, under the pressure and process of a selective force, is the production of a whale, while under similar influence, with uncertain modifications, in another direction we have a water-wagtail. Such, indeed, is the marvellous struggle of life as presented in this theory, that under conditions more or less favourable, or the reverse, the same inherent lifeenergy from the primal germ takes the forms of midges and mites in pairs at the extremities of one branch, while on another it results very satisfactorily in the evolution of the first man and his wife. The most remarkable feature in the general results from this lifegerm is, however, the fixed fact that kinds of beings,

male and female, arise who continue in a strange manner to produce their own likenesses, and that with such persisting obstinacy that no philosopher has ever been able to detect a trace of a tendency in one kind to become parents of another kind, or even to discover when kinds began to exist.

Of course, if it can be proved that creatures do desire and endeavour to improve themselves and rise above their original status, and if it be also proved that the endeavour is followed, in however slow a manner, by the production of organs and faculties of higher order, man and woman might verily as well have come forth together from the ultimate struggle of the life laid up in the primitive germ as any other kind and pair of creatures. It will, however, be but becoming modesty to wait for the proofs before we commit our reason to the belief of such a theory, even though in the meantime we get the discredit of being charged with prejudice, in consequence of our pre-conceived opinions. But are we not warranted to defend ourselves from the charge of unfairness by venturing at least to ask the question, When human nature was any other nature, or at what period in the past it emerged from the inferior stock, and began to walk erect and to talk with some show of reason about the propria quæ hominibus?

CHAPTER IV.

CREATION NOT CONFUSION.

Ir man did not begin as man, how could man begin? If there sprang from some reptilian spawn a Protean sort of being that, during long ages of struggle for life. passed through all the various stages of each lower order of animated existence until it emerged at length, through some approximate maternity, into the veritable form of a man with a human mind, we should still be justified in making research for evidences of this strange metempsychosis; and if we did not discover those evidences, we should no more be required to credit the assertion of such a process than to believe the less wondrous transmigration of souls, as taught in Hindoo mythology. But presuming that the Darwinian hypothesis does not assume this system of metamorphosis, what does it assume? If it means that man has not actually passed through an infinite series of transitions, does it mean that one form of being was transmuted by degrees into another form, until ultimately man appeared? Then it becomes a question whether any idea of identity and individuality could be entertained as any part of such theory of transmutations.

mutation implies that something essential and identical passes through certain changes. The idea presupposes the identity of whatever may be thus subjected to mutation in form or appearance. To speak of human nature being transmuted from another nature, as, for instance, by proceeding from the ovum of another creature, is a contradiction in terms and utter nonsense. Identity is in the force that preserves individuality in the midst of apparent changes. Thus our bodies are constantly changing atom by atom, but yet they maintain their individual character. But what is so far true of man's body is in a fuller sense true of the man himself, whatever alteration may take place in his condition; whenever he is conscious, he is conscious of his own personality. But there can be no identity of nature in any respect if all nature is but a series of variations from one kind of creature to another.

If man be derived from an origin neither directly human nor directly divine, but from an ancestry proceeding from primordial mucus up to some anthropoid monkey, who became the first man's mother, then throughout the progress, from the lowest form to the highest, a series of changes must have been effected in some way, either transitional or transmutational. Under this kind of change, or that, there must have been successive periods in the process, when the transmitting form was neither more nor less than a mere intermediate link not to be identified with any kind of creature, neither bird, beast, insect, reptile, fish nor frog, but tending nevertheless to become a man. It is

far easier to understand how the same atoms may have assumed various appearances, for so we may believe the transmutation of lead into gold; but what is neither one thing nor another is nothing.

Without definite natures as well as immutable elements, order, heaven's first law, would vield up all the realms of nature, organic or inorganic, to the ruleless sway of confusion, and chaos would come again, if it ever came except in human theories. Why is there a limit set to the power of combination among the elements? Why are all the dead forces bound by God's own hand to keep their places under the law of equivalent affinities, in lines and classes from which not an atom of deviation is for a moment permitted or possible? Why is this, and yet the developments of life from monads to man left at liberty without specific permanence or power to maintain their distinctive parallels? The question is affirmative of the fact that there never has been, and there never can be, a transgression of the physical laws on which organisation There may indeed be monstrosity by interdepends. ference, accidental or artificial, with the laws of nature; but the occurrence is exceptional and only proves the rule, for monstrosity, or lusus natura, is never permanent. It is only mixture and confusion speedily arrested by the balance of the opposing forces which produced it. The existence of disturbance in nature is thus, so to say, foreseen and provided for; it is always limited and arrested by the permanent laws of nature, which are those of order and consistency.

Therefore we may ransack all the nooks of nature and rummage all the rocks, but shall ever fail to find a single specimen of an organised being, extant or extinct, underived from a kind of being, a species, like itself. The very idea of creation includes the necessity of order which signifies nothing but classification. Thus the varied lines of life may approximate, but can never cross.

All the natural selections in physiology, as, for instance, that by which the organs, under a vital endowment, select their own materials to live and grow on, obey laws that, being, as before said, interfered with, may produce monstrous admixture and so monstrous development; but as surely as monstrosities result from disturbances of natural processes, so surely they can never be permanently propagated. And on the same principle it would also be impossible that natural selection, either instinctive or organic, should convert even a dove into a pigeon, much less a monkey into a man; nor, indeed, except under the dominance of a fancy wilder than that which produced the metamorphoses of Ovid, would any man imagine that the 'germinal vesicle' of one creature could ever be developed into the form of another. Nature is not a mass of contradictions, but a vast consistory of designs that cannot lose their designations without undoing the work of the Designer. We may be unable to draw a line of demarcation between variation and species, or to follow it where it exists. Species are in great measure undefined by science, but the distinctions of kinds are

yet clearly marked. Whatever the variety in development, a human being is always recognisable as human in origin. And thus it is with all kinds of creatures. For instance, there are no creatures more diversified in form and development than the canine races; and yet every dog is at once significantly recognised by its kindred dog; and thus it is also with every variety of animal, each knows its own kind.

The hereditary tendency, or avitism, is the counterbalance to the tendency to divergence into variety as the result of sexual admixture, the peculiarities of parents blending in their offspring, but never to the production of a new species. If there were not limits set to avitism as well as to variety, we could not, of course, doubt the possibility of endless sameness from the influence of the one tendency, or endless deviation from the influence of the other. But they are antagonistic forces that limit each other. The diagonal between them may by disturbance become a wave-line. but yet ever intermediate, and passing still from one fixed point to another from beginning to end, so that the species on this side never permanently blends with the species on the other. The lines may, by man's interference, be caused to touch, but where they touch they terminate, and, so to say, begin again. Hence hybrids either do not propagate, or, if left to nature, revert to their original types.

From these reasons, and many more that might be easily adduced in a systematic view of natural facts, it will probably be manifest enough to every unbiassed mind that Darwin's hypothesis concerning the origin of species, whatever it may accomplish towards a better understanding of natural history, is only a beautifully ingenious outrage to reason, so far as it is applied to the explanation of the organic differences existing in the various orders of the animal kingdom. Nor is it less so in relation to any region of life. Were it true, there could be no such thing as definition. And, in as far as it relates to man, it would subvert our moral standing in relation to God and our neighbour. confounds the brutal nature, which has no moral relations, with man's nature, whose true dignity is all moral and spiritual. It links us with beasts and creeping things, not merely by creation, but by direct derivation of mental faculty, power, and affection. excludes the especial breath of God from the body and soul of man. And, believing that hypothesis as truth, we might easily be tempted to exonerate ourselves from obligation to observe the dictates of conscience in relation to what is purely human, immortal, and divine, and that in virtue of our animal inheritance of life and death, propensity and passion. Still, thank Heaven, it is man's prerogative, and man's alone, to overrule the lower nature by divine persuasives, the strongest of which is our consciousness of relationship not to brutes, but only to Divinity and to one another, as made to worship God. We must not trace 'the ills our flesh is heir to' up to an origin in brutes, nor lay our moral perversions to creatures that know nothing of sin, lest we also should lose all sense of its enormity as a

thing incongruous with the well-being of the moral universe.

Had not man indeed been by his bodily organism and sensations somewhat akin to lower creatures, he would have been out of place in this world, and incapable of duly exercising his lordship over animals. He would have had no sympathy with the groaning of creation. But now we understand how the Divine covenant with man extends to lower creatures, as under him, and capable of suffering from and by him, though not of sinning with him. Hence we can be just towards animals, but not merciful. It is often said that 'the merciful man is merciful to his beast;' but that is a mistake. Beasts cannot commit crimes, and therefore they do not demand mercy. The sentence is, 'The righteous man regardeth the life of his beast.' And what does that mean, but that the man who has the life of any creature dependent on his power cannot be righteous if he would abuse that power? And if by Divine appointment the life of any creature is suffered to be taken to sustain the life of man, it is because man should thereby be taught, as by the institution of sacrifice, that the guilty are to be saved not merely by the substitution of the innocent in their stead, but by learning how the guilty may become innocent by offering themselves in self-sacrifice and service when the Giver of life demands their whole being in devotion to Himself.

CHAPTER V.

THE MORALE OF MAN AND BRUTE.

THE assertion of our dignity on the ground of our own consciousness would not be admitted as an argument by the advocates of the transmutation theory; because, as they believe in no special creation beyond some unknown primordial germ, from which the first man was at last produced, as the terminal point of an immense series of animals, so they believe that there is but one kind of mind, and that, in fact, men and brutes are essentially one in nature, both mentally and physically. The difference, they say, between their own thinkings and those of creeping things, birds, and beasts, is only that of degree, not of kind, all the varieties of manifestation being dependent on bodily formation; or, rather, they deny that what we call mind is the manifestation of a distinct entity, acting with or upon certain conditions of material arrangement; and they assert that it is only a product of physical force, just like heat or electricity, thus confounding things essentially different—a being having consciousness and volition with a mere chemical agent. When they show us their thoughts in a test-tube,

and deal in ideas by weight and measure, or give us the quantitative analysis of their own brain and its products, we shall believe them, and not till then.

Now, as we do not pretend to know what either mind or matter essentially is, and as we cannot show minds either in a solid or a gaseous state, having, like matter. different qualities, chemical affinities, and so forth, we cannot demonstrate that man's mind is a different sort of thing, in that sense, from the mind of a mouse or a monkey. But we can show that it has different qualities and affinities of an intellectual and moral kind; and therefore, as we conclude from the different affinities of matter the difference between various kinds of matter, so we can infer from the affinities of different minds a difference in kind as well as degree. There is no other method of determining differences between things. What is matter but the manifestation of force? They exist together, they cannot be separated even by thought; we know nothing of physical force but by matter, nor of matter but as a form of force. The physical world is a world of forces or powers acting in harmonious co-operation. If matter be the manifestation of force, the forces themselves are but the manifestation of a Will that gave them laws under which they thus co-operate in all their correlations in a prescribed manner. Science cannot exorcise spiritpower out of nature; will in nature points to a Person. residing somewhere, who made nature.

But, in truth, do the transmutationists acknowledge any difference essentially between the forces of mind and those of matter? We wot not; since they make bodily formation not merely the criterion of mental manifestation, but really of mind itself. Now, though we cannot say what either mind or matter is in its essence, there is truth in the witty saying, 'What is matter? Never mind. What is mind? No matter.' But we cannot think to any purpose without thinking of both. They are essentially different; and therefore, as matter varies in kind as well as degree of force, so may mind vary.

Who can think of matter as capable of thinking, or of physical forces as determining on their own actions? It is the spirit in man, and in man alone, that recognises all the powers, whether in matter or in mind, as dependent creations, and as expressive of the will of a living God, a will Almighty. Even myths themselves are but as approaches of man, in his want of knowledge and his longings to know, towards a Divine revelation. As the self-consciousness of man is only the consciousness of his thoughts, of his body, and of outward things, so all his science, art, and philosophy is but man's method of feeling and expressing the co-ordinations of nature with his own mind. He interprets everything as having relation in plan and purpose to the human faculties. Thus, abstract truths and pure sciences are but the laws of the human mind. too, as science relates to human faculty, and is founded on the knowledge of facts that bear upon the mental constitution of man, so religion and revelation bear upon the moral and spiritual constitution of man, and he cannot, without contradicting his own moral consciousness, but believe in a God who reveals Himself to man, the revelation being indeed to the mere idealist the world itself as the circle of his own being, and to the mere materialist nature as relevant to man, but to the Christian the mind and will of his Maker as expressed in words as well as deeds.

If facts prove anything, they prove that minds are not all of one kind, only diversified by the form of the brain producing it. Can any one predicate from a beaver's brain what a beaver could do? Or if he can discover the brain of a bee, will that account for the ability of a bee to construct hexagonal cells on mathematical principles of exactness, to discriminate flowers, collect honey, and live with others in a kind of civil community. There are bees that do none of these things. Does that arise from state of nerve merely? And if it does, from what arises the state of nerve?

We must acknowledge the profound difficulty of the subject, and we would endeavour to consider it with due humility and reverence. Whether created mind is necessarily embodied or not, is a question open to those who possess metaphysical acuteness and acumen capable of following the abstruse enquiry into all its bearings. Happily, we cannot but acknowledge the existence of the external world because the very constitution of the human mind, its physiology, so to say, obliges us to this conclusion almost without reasoning about it. The existence of mind itself, as having this consciousness, of course stands first in logical order.

The existence of matter is an inference of the mind, and therefore to admit the existence of the external world is also to admit that mind has a distinct existence antecedent to the reception of those impressions by which the mind is convinced of the existence of other things. We presume, moreover, that there is not a human being so materialistic in his ideas as to affirm that there is no Supreme Mind absolutely independent of matter. If so, there may be created minds also independent of matter; and therefore to affirm that mind is nothing but the product of animal organisation is to deny both the existence of the Creative Mind and that He could create minds of different orders independent of animal organisation. The existence of animal organisation and mind in the same creature as seen on earth does not interfere with our conception of the distinct existence of mind and body. We only assert that there is a difference between mind-power and body-power. Whether the body is created for the mind or the mind for the body is another question. Their separate existence is possible, because, in fact, they are distinct in their nature. That they necessarily co-exist while we remain alive on earth is another fact, and that for the simple reason that without their united action we should have no outward and manifest relation to one another or to the objects of this earth, which are all related to the bodily senses as well as to the mind. As creatures bound to the conditions of time and space, our minds cannot but be subjected to the organisation by which we determine our place and

position in respect to the movements and relations of other existences within the sphere of our senses. that which determines should no more be confounded with the means of determining than an astronomer should be confounded with his telescope. Thus, concerning mind as well as of the qualities of things, we can only reason from our own consciousness; and this consciousness enables us to perceive that no other living beings about us except human beings evince the possession of mental qualities akin to our own. We therefore conclude that as our conscious minds have qualities peculiar to themselves, so whatever mind belongs to brutes must have peculiar qualities also, and cannot be but different degrees of the same forces operating on man's brain to produce human deeds or ideas and on the insect's brain to produce instinctively a mathematic work like the honeycomb or the web of the geometrical spider.

Mr. Huxley strongly and truly maintains that if Mr. Darwin's views are sound with regard to living creatures in general they are equally so in application to man, because it is 'demonstrable that the structural differences that separate man from the apes are not greater than those which separate some apes from others. There cannot be the slightest doubt in the world,' he says, 'that the argument which applies to the improvement of the horse from an earlier stock, or of ape from ape, applies to the improvement of man from some simpler and lower stock than man. There is not a single faculty—functional, moral, intellectual, or instinctive—that is

not capable of improvement; there is no faculty that does not depend on structure.'* The very things to be proved are here assumed. The thing to be proved first, is that a horse or any other animal is derived from a lower stock—that is, that one kind of mind and body has been improved into another mind and body. As science is based on observation of facts, we ask for a single fact in evidence that, by either natural or artificial selection, any creature was ever improved beyond its original stock, much less improved into another kind of creature. For instance, was there ever a right proper donkey fed, trained, educated and instructed till it became a horse, or the father of one by a mother of asinine kind, equally well educated at the improving school? And where among the apes, so accustomed to refined examples in the Zoological Gardens, do we find an ape improving into a man? And has it yet been seen that one sort of ape aped the higher sort so effectually as to become or to produce a superior breed? We wait for such facts before we deem it scientific to assume that man is but an ape improved by mental aptness at selection or any other means.

It is asserted that mind and morals depend exclusively on structure, and, of course, if the theory be true, mind and morals not only depend on structure but are produced by it; for if an ape can be improved by good breeding into a man, the ape-mind becomes human-mind by the structural process of improvement—

^{*} Huxley's Lectures to Working Men, p. 152.

conscience, self-consciousness, and all—which is a proof of unity of mind with a vengeance. Now, every physiologist well knows that variation of function does not bear an exact proportion to variation of structure. If it did, the gorilla ought to have more mental sympathy with man than he has ever evinced. There is something invisible behind structure that determines function, or the brain of the fool would not so closely resemble that of the philosopher.

Can anyone discover from the form of an animal's stomach, for instance, what food is fit for it? structure of a sheep and a goat can scarcely be distinguished, and yet what is poison to the one is the food of the other. A few leaves of laurel would be fatal to a cow, while a goat makes a full meal of laurel leaves with impunity. So monkeys eat tobacco with avidity, though it proves, when eaten, most violently poisonous to the human body.* Thus the nature of a creature is not to be determined by its structure alone, but rather from considering for what it is formed, and its vital relations. All the instincts tend only to keep up specific differences and never to confound them, and animals may almost as readily be classified by their habits as by their forms, all classification being arbitrary and conventional, a mere convenience of drawers and shelves for placing things where we may handily find them. Yet Mr. Huxley deems it an argument for the relation of man to monkey, to say: 'It is demonstrable

^{*} See Intellectual Observer, Oct. 1863, p. 304.

that the structural differences that separate man from the apes are not greater than those which separate some apes from others.' That is to say, 1st. If faculty depend altogether on structure, man is as much an ape as some of the apes themselves. Thus he proves too 2nd. Still he believes there is an infinite mental divergence between apes and human beings; but, if the structural difference be the sole cause of the mental difference, how can that be? He only contradicts himself. There is not an infinite divergence in mental quality between apes themselves, and therefore if the structural difference between man and ape is not an infinite difference, structure cannot be the sole cause of all the difference between men and apes in mental and moral faculty. The change effectuated in a man's moral status by moral and spiritual conviction, is not a structural change; and the difference between the thoughts of a saint and those of an untamed savage is not due to an alteration in the form of his brain but to the degree of his enlightenment and the circumstances which regulate and determine his power of attention and will.

All the forces in nature belong to the invisible world, and all we know of them is, that in their effects they exhibit the outworking of an infinite variety of designs, existing before either the structure or function in which they are fulfilled. What forms a germ? All the powers evolving phenomena or appearances must precede what they produce. Thus, the power producing the germ of any creature is at work before the germ is formed, and

hence the germ itself can never be developed into anything but that which the specific power pre-existing determined in the nature of that germ, which is in the nature of the parent. The kind produced is that of specific mind or instinct as well as that of structure; and therefore, as surely as there are different kinds of animal bodies produced, so there are different kinds of minds included in the original design evolved in the germ and developed from the germ.

As one of the recognised powers that influence both moral and physical development, we may revert to avitism, a word derived from avitus, an ancestor, because this power is a principle in nature which determines that the offspring shall resemble its antecedents, and begins to act before the germ itself is formed. Here is a law fixed firmly in the nature of things, and what can be the force and meaning of that law but to fix a limit to the possibility of variation? It makes the continuance of kinds unavoidable, not to say species, because this term is too unsettled and indefinite, for scientific minds are not yet agreed how to define the word species. There is no doubt a tendency to variation, from the mere fact that the characteristics of either father or mother, irrespective of accidental interferences, may be mixed in variable proportions; and it is this very tendency which is so counteracted by the law just mentioned—avitism: that like begets like, is a true as well as a proverbial Monstrosities also occur, as before said, from interference with individual development, but they are never continued because prevented by the innate check upon variation of any kind by the tendency ever to recur to the ancestral type. Without a certain tendency to variation how should we know one another? But if variation passed the verge of kind how should we know ourselves? Without variation there is no individualism, but variation without limit is confusion. Doubtless a degree of accidental variation may become permanent, or at least be prolonged to an indefinite extent, where opposing influences are excluded by circumstances; and, in fact, the distinctions existing amongst the various races of mankind are due to such variations, but they never extend beyond a certain limit, or humanity itself would vary into something else.

In consistence with this law of avitism, which, in the nature of things, must be invariably active in limiting variation, we have also the law which puts a full stop to any attempt to break the order of nature in preserving the continuance of distinct kinds of beings. The confusion of hybridism cannot be propagated; it began by man's interference, and ends where it began.

We will acknowledge that Darwin's hypothesis of change of species by selective modification is a bold and ingenious endeavour to account for many mysteries in the organised world. It is a vast improvement on the wild speculations of De Maillet, and the less wild hypothesis of Lamarck. But it is an attempt to avoid the simple acknowledgment that God created all living things according to their kinds, and with power to produce their like in mind and body. We do not wonder that

the first step towards proving the truth of the hypothesis is altogether wanting. As Mr. Huxley says, Mr. Darwin ought 'to demonstrate the possibility of developing from a particular stock, by selective breeding, two forms which should be infertile with one another.'* Now, Mr. Darwin has not shown this, nor has he shown, in consistence with his hypothesis, how it happens that he cannot point to a single instance where different species, either under natural selection or unnatural restraints, produce a new kind that will continue to breed together. Failing in these, the only demonstrations demanded by his hypothesis, we may rebut all his arguments with the simple fact that two laws are fixed in nature against the possibility of his hypothesis being true; the one is avitism, the law which limits variation by parental peculiarity, and the other hybridism, which being in itself a limited confusion of nature produced by interference, bears in itself a barrier to the extension of that confusion in the fact that hybrids cease to breed their like. there be a law whereby transmutation is promoted, either by natural selection or any other means, there is also a law to prevent change of kind, and the one is incompatible with the other.

Seeing, then, that the Maker of nature has set in nature such fixed limits to deviation from the persistence of kindred and kind, we may, without being thought too stupid to understand argument, conclude

^{*} Huxley's Lectures to Working Men, p. 146.

that there is no reason for believing that apes and men are but bodily and mental modifications derived from the same stock. It rather follows, from the law of avitism, as an inevitable truth, that all living creatures were created according to their kind, and therefore that the first man was expressly created as the parent of mankind, and not produced as by a natural selection from a peculiar race of apes, who were wiped out from creation without leaving a trace of their existence behind them. The law of avitism, of course, applies as restricting the dispositions and instincts in lines of inherited peculiarity equally with the distinctive characteristic forms propagated in kinds.

CHAPTER VI.

MAN THE PRIMATE.

EVERY creature takes its place in nature; and that is precisely the proper place for any creature which it is best qualified to occupy. In this respect man is undoubtedly the primate—he takes the first place; and notwithstanding that Mr. Huxley merely follows Linnæus in his class of primates, including man with apes and monkeys, he not only uses a contradiction in the term primate as applied to any creatures but man, but he also contradicts facts, for there is no creature that can be classed as on a par or even next to man, in respect to position arising from endowment. Man is the first, that is, the only primate, and the rest are equally at a distance below him. There cannot be two or three primates in the same line, nor can two creatures with an infinite divergence between them be ever, on true scientific principles, classed together. Even according to Mr. Huxley's own acknowledgment, there is an infinite gap between man and the ape. Yet he leaps over this gap by an anatomical effort, and classes man and ape in the same category because their bones are somewhat alike, and so, notwithstanding the infinite

disparity in their minds, they are both primates. How does he account for the infinite disparity in their minds if their structural similarity be so close, seeing he asserts that there is no faculty, moral or intellectual, that does not depend on structure? He must, as already shown, either have overlooked some marked difference in their structure, or he must be wrong in his conclusion as to the dependence of faculty on structure. Man in his pride, folly, and madness, often mistakes his place among his fellows, but animals never naturally lose their place. If any man will strive aright to attain his right position, he will find the place God designs for him, which is the best place he can find. A diamond and a coal are rightly classed together as consisting of carbon, and so may the bodies of men and monkeys be classed as akin in the matter of bones; but taking the qualities that appear in them, who would practically place them together?

Man's place in creation is not quite determined by his seeming anatomical affinities. Is he or can he be placed next to the ape merely because his bones, muscles, and brain are somewhat like the ape's? No; by his tastes, actions, and habits he is formed and fitted for purposes entirely beyond the reach of chimpanzee or gorilla. It is not general resemblance in outward form that justifies a naturalist in classifying two creatures together. Minute differences in some particulars may cause them to live and look wide apart. A horse and a rhinoceros, as to their skeletons, are very similar, but in habit how unlike! The difference between the

minute structure of the human body and that of the ape is really immense, and no true anatomist would mistake a single bone or muscle in man's body for the ape's; neither would any physiologist say that any part of the human fabric would be suited to the ape's manner of life; and no animal could take man's place, simply because, whatever the general resemblance, there is no more fitness for man's proper employments in the body of a brute than there is in its mind.

The question is not what is it like, but what can it do? That determines man's place, both bodily and mentally. True, men teach monkeys human tricks, and multitudes have paid to see a man do badly what a monkey would do better. But that only shows how fond fools are of seeing contrasts and incongruities; wonder is more congenial than wisdom to minds that seem unconscious of themselves without something sensational.

It does not require many ages to make roving men into savages, but all the ages have failed to make a savage into a simian primate, an ape of even the first class, or to improve an ape into a fetish-fearing negro, that other possibly improvable species of man. Science, at least, does not record any instance of savages being transmuted into apes; but perhaps the transmutationists may be thankful for a tradition in their favour, and therefore the authority of the natives about the Bight of Benin may be quoted, to the effect that the chimpanzees abounding there did once belong to their tribe, but were expelled for their filthy habits; and

the consequence was, that, not improving their propensities, and being entirely inattentive to their morals and manners, they by degrees assumed a beastly form in keeping with their mental condition.* A moral for us, and a fact, with a fancy in it, not to be overlooked in any future edition of Professor Kingsley's Water Babies.

It is not true, however, that man's physical nature is so nearly allied to that of apes as to afford even the slightest grounds for the suspicion that they are related by natural descent. An ape is not only a beast by birthright, in being exempted from human responsibilities, tailors, cooks, and clergy, but he is a beast every bit of him. From germ to full growth and greyness, every atom of him is essentially ape—only ape; every fibre, every hair, every pore, every function is altogether other than human in mould and fashion. The very globules of the blood, and the liquor in which they roll and live, are so different from man's, that they would probably convey death instead of life if injected into man's veins.

We might refer to functions of the body which are timed, the importance of which may be philosophically appreciated; the beat of the heart, the tone and contraction of the muscles, and, indeed, all the workings of the body are differently timed in man. What would any human mother think of a baby born with a full suit of clothes on, and with arms strong and long

^{*} Dr. Savage's Paper, quoted by Huxley, Man's Place, p. 45.

enough to clasp her neck at once, and to hold on through any extent of motherly vagary, night and day, asleep or awake, for months together, until the little attaché has done with mamma and sets up with teeth enough for himself? That is just what a baby ape does. There is bodily adaptation from the first to its native place and position. But a human babe comes into this breathing life with the divine demand of weakness on the mother's heart, which responds with a consciousness that the Hand which placed that babe upon her bosom, and opened a living fountain there, is the same that holds all the stars, and caused woman first to feel the tender touch of her God and Saviour, as imaged in an infant lying at her heart. It is the helplessness of our nature, without the provisions and previsions of parental love, that when we are conscious of that love, imparts to our minds a sense of our relationship to the Being on whose love and power we are throughout dependent.

CHAPTER VII.

LIKENESS AND UNLIKENESS.

Let us retrace our steps a little way, again to consider a few points of interest in the path we have passed, and look again at the apes. Learned anatomical authorities, like Professor Huxley, have certainly expended a large amount of labour in vain, so far as it has been expended, in demonstrating the general likeness of man's skeleton to that of the ape; for this is a fact that was never questioned. A mammal destined to dwell in trees in the manner of an ape, could scarcely be otherwise than somewhat man-like in general form. before said, the ape had not long arms to reach the branches and fruit on which it lives, and hand-like feet to afford a firm hold while it used its handy paws, or sat upon a bough to crunch its snatched meal, it would be thoroughly out of place in its arborial habitation. Its brain must be in keeping with its limbs and senses. and therefore bear a general resemblance to the human brain. But then an adult gorilla, three feet across the shoulders, would have a brain only half the size of that of a human being at four years of age. The gorilla does not possess that exquisite balance of nerve, that

harmonious sensitiveness of nervous combination by which the functions of the muscles in every limb, and especially those belonging to the organs of voice and speech, and those of the face, are made to correspond in their action to express feeling, will, and thought. That harmony pertains only to man, whose body is perfect in proportion rather to its power to express mind, and to execute acts of reason, than to clutch and climb, which are brutal adaptations. The perfection of the ape is limited to the development which qualifies it to enjoy its mode of life as a mammal at home only in trees; and its perfection would be departed from precisely in proportion as it should in any degree more nearly resemble man. If it had a more perfect hand, more approximating to our 'instrument of reason;' if it had a less bearlike skull; if its teeth became more like aids to utterance and beauty, instead of being as they are mere instruments, like those of the dog, for cutting, tearing, and grinding hard food; if its spinal column were less curved; if its head were balanced on that column, as in man, and not hung on with the aid of especial ligaments; if its hind paw were a real proper foot, fit to stand erect on, like man's, and not a compound convenience neither quite hand nor foot; if, in short, its whole anatomy of bone and muscle were more like man's, the ape would be spoiled; and yet he would be not a wit more human in action or expression unless it had also a human mind. But to imagine such a possibility is to imagine an absurdity, assumed to be possible only by those who talk of improving one kind

of creature into another; or of a tendency in apes of some unknown race to produce a higher race that might ultimately produce a man and a woman to perpetuate humanity.

Why, then, set up a line of apes' and monkeys' skeletons as if marching with man at their head, as Professor Huxley has done in his grotesque frontispiece? Neither apes nor monkeys are in the habit of walking nearly erect, nor of following the leading of man. Anatomists have no right to insult man's dignity by constantly insisting on a certain degree of likeness in the bony framework of man and monkey, a likeness which none disputes, but which certain anatomists delight to exaggerate, as if with a graven sneer at manhood. It would be more to the purpose to exhibit the disparity rather than the resemblance; for the resemblance seems, but the disparity is real. Better demonstrate the exquisite and wondrous adaptation of man's brain, hand, form, and face to those nobler faculties in which no animal approaches him; for none but he has either a mind or a body adapted to analyse and subdue the elements. As Professor Owen says, 'The foot by which we walk and stand erect, the hand which, so liberated, can apply its matchless structure to the biddings of a high intelligence, and the organ itself of that intelligence, are severally structures peculiar to and characteristic of human kind.'*

The human form has a divine meaning, and therefore

* Athenæum, 1863.



man's fore-limbs are not organs of locomotion, as they are in all other mammals. They subserve his intellect even more than his appetites; and, indeed, the the whole material structure of man expresses his intellectual character precisely in proportion to its perfection. Man, therefore, 'is the archon of creation, and not one of the primates alongside the monkey.'* Man is not limited by being man, but by neglecting to exercise his manhood and humanity, which belong not to the body only but to the infinite of thought. 'It is most unphilosophical to attempt to trace the history of man without taking into account the most remarkable facts in his nature; the facts of civilisation, arts, government, speech; his traditions, his internal wants, his intellectual and religious constitution.'t

If man's place in creation be not determined by special adaptation, but by a random kind of selection—the dying out of the incapable in the struggle of life—then neither he nor any other creature has any fixed place, and if not a fixed place, then he has no place, for, in fact, to be without fixed and defined limits is to be without any allocation. The question resolves into this:—Is there any such thing as adaptation? for if there be adaptation among the various organic beings to each other, they must be permanently adapted, and if so, restricted in their relations by fixed laws; and therefore cannot have had anything to do in selecting or determining the means by which they became thus

^{*} Professor Rana.

[†] Whewell's Address to the Geological Society.

adapted. Are there not fixed affinities among living beings? If there are, they cannot create new affinities for themselves, any more than the affinities of chemical substances can rearrange themselves by the transmutation of one element into another, for this would be to lose themselves. Affinity does exist in animals, for every living thing has its proper habitat and propensities. In short, without fixed affinities there could be no order; for affinities result from fixed laws, without which there could not be any such thing as we call nature, for what is the nature of anything but that which the law of its being necessitates? Therefore we say that without fixed law in everything, chaos, if it ever were, would come again. But, if there be such a thing as transmutation, the law which makes any kind of thing what it is must be suspended, that it may admit of change into some other kind of thing. as every single law in nature is but an adaptation or power co-operating with every other law in nature, to suspend one would be to introduce confusion into all: but the Author of nature is not the Author of confusion but of order, that is to say, He is the maker of kinds. Whatever of modification is possible also results from fixed law, which necessarily sets a limit to the modification itself. Whether we can define the limit or not does not affect the argument; a thing modified is still the same thing under other conditions, it keeps its place, so to say; thus, with all the modification of pigeons, cultivated as they are, perforce, under all sorts of artificial selection, the nature of pigeon never so far

transgresses its limit of pigeon nature as to be mistaken for even the nearest of its allies—the family of the doves-much less a wren or a raven, a hawk or a heron, a dog or a cat. Reason, then, demands our belief in the existence of an impassable line of demarcation between man's place and the place of apes If the line between them is not imand monkeys. passable, neither man nor monkey has a proper place in nature; and, as two things cannot occupy the same place, so neither can they be changed the one into the other; their very existence implies their keeping apart for ever. But it is folly to talk of natures at all without supposing fixed limits, without which nature itself would be inconceivable, and creation be but an unmeaning word.

On this ground, there must have been a first of every kind. If there were not a first man, whence came we? If the first man, so called, grew out of an ape, there was a point at which he was neither man nor ape. Then what was he? What nature was it that determined the ape to drop itself and become a man, fine by degrees and beautifully less and less like a gorilla? We only extend the difficulty by fancying several stocks of human origin, so many kinds of monkey for so many races of men: the question still recurs, What nature was it that was grafted on the monkey to make the man? The very existence of parentage, being a law of nature, is a sufficient proof that living things were created in kinds. It is true that there are at least a hundred thousand different species of living creatures,

and among them some very nearly approximate to others, but then they are never known to cross, however they may touch the line between them. Everything is possible but such confusion in God's works. Every possible variety of living thing is or has been on the earth, because, in the work of Omnipotence, whatever can be is in fact, but contradiction such as transmutationists conceive can exist only in their own minds, and there only because confusion is there.

'All force is blind, and must be directed. In order to produce certain determinate species and not a kindred one, in order to avoid being lost amid the various paths of metumorphosis and geneagenesis, it is requisite that even life itself should be placed under the control of something superior. This something is the specific nature of each being—that which each plant and animal has received from its ancestors. In order to explain organic nature it would be necessary to refer to the origin of all things."



^{*} A. De Quatrefage's Metamorphosis of Man and the Lower Animals.

CHAPTER VIII.

EXTREMES MEET.

These are the days of extremes. While one is denying the unity of mankind, and demanding forty or more centres of human origin, with perhaps as many kinds of apes to start from, another asserts the unity of everything, from mites to mammoths. All the old faiths in man's creation, duty, and destiny, with God's especial works in calling forth distinct orders and lines of life in nature, are set aside by men who substitute their own hypothetical creations for those of the Divine Word, as effete delusions; and we are expected to believe in their greater wonders of omnigenous omneity. It seems now that snails, snakes, spiders, lobsters, starfish, black beetles, barnacles, bats, whales, and women, with all their collaterals; creatures that live outside their bones and those that sit within them; vertebrata, crustacea, articulata, radiata, mollusca: are all derived from one original egg, and are only branches of the same stock; the family likeness more especially appearing between men and monkeys.

This is something at least large enough and marvellous enough to exercise the utmost powers of our believing faculties, and to expand to their widest the eyes of our mind; but is it worth the effort to convince ourselves that we see aright, or rather, with Tertullian, to say, 'I believe because it is impossible'?

But let us see, if possible, how this wonderful creed has been brought about. It is evident that all the forces of nature subserve the grand purpose of maintaining a perpetual succession of beings capable for a limited time of enjoying life, the full capacity of which enjoyment is expressed in the formation of each creature's body. The bodily organisation is in keeping with the nature of each creature, the power of desiring and of fulfilling desire being exactly measured by the form and functions of the body. Thus, the larva of the butterfly has desires fulfilled in its larva state; it then feeds on leaves, but by degrees it undergoes a change both in its form and its aptitudes: it no longer crawls and feasts on garbage; it comes forth with all the attributes of a new creature, it flutters with glittering wings, as if itself a 'winged flower' amongst the blossoms. It is now endowed with desires in keeping with its new development; it sips nectar held out before its eyes by the All-providing Hand. The tastes and attributes of the butterfly are utterly different from those of the grub, yet it produces eggs or germs that must all pass through the grub state ere developed to that perfection which begins in creeping darkly and ends in floating on the sunbeams.

But the butterfly was really in the grub and in the aurelia or chrysalis, as every entomologist knows. The



beauteous winged creature results, not from a transmutation but an unfolding, just as a flower is unfolded from a bud. Thus the man of intellect is unfolded from the babe. There is no transmutation, and all the change of taste and mode of life is but a development of the nature once enfolded in its own peculiar ovum; not a development from another nature. The totality of butterfly existence extends from the life-force in the butterfly's egg to the life-force in the full fly, just as the totality of human nature extends from its germ and conception into all it may become in this world or the next; all its evolutions are human and only human.

Now here is an immense extent of development from the same germ. Is it not then possible, say some, that every living thing may have a relationship in common to some particular germ? There are shades and gradations of similarity between the utmost varieties of living forms; therefore may they not all have been developed from one original under the pressure of especial conditions, the struggle of a tendency to live in what form they might, some way or any way? May not different species as well as varieties—and if species, may not genera and classes, may not all forms of life —have resulted from natural selection, from the triumph of a strife to make the best of matters and get the best positions possible to live on, and in the strife and struggle secure, by different endeavours, different endowments, to be propagated to other generations? These questions involve many things-development, evolution, selection, encouraging and discouraging circumstances.

question is, then, very large; it embraces man and all the world besides.

But common sense perceives no reason for such a large and loose set of questions. Taking hold of the first idea of development as the fulfilment of a preceding design, and having disposed of that we dispose of all the rest. A thing designed to be a butterfly becomes a butterfly, and a man a man, grub state notwithstanding, for man, too, may have his grub state. Can we discover or imagine that development means anything more than the order in which each living thing reaches its specific maturity, through specific changes, from a specific germ? Speculative science, however, comes in with liberal surmises, and puts a full stop to common sense, by asserting that there is no necessity for supposing the necessity of limits at all, for what produces any variation may produce all varieties in species and kinds, if you give it time enough. In short, this sort of surmising, falsely called science, sees no reason to believe that God created things in their order, but only, at most, breathed life into a primordial life-mucor, in order that order might come out of it in time. So it is nonsense to talk of specific arrangements and parallel lines of life that The whole of life is, according to this never cross. theory, a perpetual motivity of crossings, from man to monads, in consequence of a natural power of selection inherent in every living thing. But common sense still obstinately persists in its own opinion, and says to the man of surmises, 'Good sir, do you not forget that

your inherent power of natural selection determining species contradicts itself? What is inherent or born in anything but that which keeps it from change and constitutes its distinction?' One thing can never have any tendency to be another, and therefore a monkey can have no tendency to become a man, nor to beget anything more like one than itself. The better to understand the struggle so long existing in men's minds to avoid believing that man was created as man, but only as an infinitesimal atom in a globule of life to be developed into man in the procession of ages, we should look into the theories that preceded the last one now in fashion.

We will not now dwell on spontaneous generation, since philosophers have at length pretty generally come to the conclusion that dead matter cannot assume life, and that creation and procreation are both facts of a necessary kind. Nor shall epigenesis nor evolution detain us. Monboddo, with his man-like monkey that took to sedentary habits and rubbed off his tail by sitting on it, and then became fit for human company, together with Lamarck, Oken, the Vestiges and the rest, we will leave to Mr. Darwin and Professor Huxley, and come at once to what the latter suggests in his contemplation of the mysteries of development. true that Professor Huxley, like others well up in their anatomy and physiology, does not affirm that man might be directly developed from the germ of any existing monkey, nor from that of any ape known to be extant or extinct. The link of family connection

is at present wanted, but it is expected to be found interred and entombed in rock somewhere, perhaps about the commencement of human existence, if geology would but inform us when that was, and if the beginning of *homo* be not still so mixed with the endings of *ape* as to defy the discovery of any commencement of humanity at all.

In default of not finding this homo-pithecoides link entombed in any cavern, though the Neanderthal* skull, it was said, came very near it, the Professor finds a proof of its existence in the embryonic condition of man himself. In short, he says that man at first cannot be distinguished from a dog, though by degrees he becomes more like an ape (with a nose), to which ape he is at length conformed very considerably indeed.

It seems rather absurd for the Professor to set himself so elaborately about proving to our satisfaction what we already must know to be true, namely, 'that exactly in those respects in which the developing man differs from the dog he resembles the ape.' Of course he does. Why? Just because man has need of true hands and arms, with upright legs and real feet, not being like the dog that brings his mouth to his food, but more like the ape that, from the nature of his habitat, brings his food to his mouth, and requires arms and a sort of hands to accomplish the feat, with legs below, and a sort of handy pedo-phalangy to rest on



^{* &#}x27;The form of this skull is the result of a synostosis, and not to be regarded as a race-character.'—Dr. J. Barnard Davis, Anth. Rev. Vol. I., 1864.

١

while he does it. That, however, does not make the ape the more a man; though of course the simian limbs, even in embryo, will more resemble man's than the four-footed dog's. The tendencies in the germ are towards the ultimate form, and no arrest would render the human embryo either canine or simian. What is the result? Only this, a dog-germ becomes a dog, an ape-germ an ape, and a human germ a man. more the development the greater the divergence, certainly, for the divergence is specific and cannot converge. The perfection of the one is in departure from the other. The whole only exemplifies the observation of Professor Owen, a good judge of the matter, who says, 'The specific characteristics mark the embryo as essentially as the adult. The embryo does not pass through the lower forms of animals.'* There is, no

* 'Arrest in the development of the human brain does not offer in any case a close resemblance to, or correspondence with, that of the chimpanzee, orang, or lower forms. It is, at best, only a general resemblance.' 'Sometimes the fœtal condition of the surface persists.' 'But all these cases [of imperfect development, as in idiots] exemplify the principle that the specific character marks the embryo as essentially as the adult. and that the embryo does not pass through the lower forms of animals. Just as the toes as soon as they appear in the human embryo characterise the foot, whilst in the ape they bud forth in the direction to form the lower hand. We know that the individual idiots supplying the examples [referred to] were the abnormal offspring of parents with the proper human brain of the average weight. Had any of these perished in a cavern at times when idiots were less cared for than at present, the skulls, falling into the hands of the transmutationist, might have been described and exhibited at the Royal Institution, as the "missing link." It is instructive to notice the close analogy of the physical phenomena in these cases of arrest of development, their manners being those of young children, not of apes.'-Professor Owen at the Anthropological Society, Athenæum, April 11, 1863,

There is a decisive mark of distinction between the development of

doubt, a general resemblance in the germ and embryonic beginning of all creatures that have back-bones, skulls, and limbs; but we should see the difference in the full development, in order to perceive and appreciate the value of the resemblance.

Professor Huxley is much startled by what he sees: 'It is only quite in the later stages of development that the young human being presents marked differences from the young ape.' If his sight had been stronger, a little more microscopic, he would not have been startled, but have seen that, as soon as anything can be distinguished, the place and destiny of each creature is indicated in its unfolding form, and that there is no

man's brain and that of the ape. The convolutions unfold in different orders in the two: they are in no way related: what appears first in man is last in the ape. Hence, arrest of brain-growth, as in idiots, does not produce a likeness to the brain of ape, but a difference marked in proportion to the degree and period of arrest. It would appear that degraded habits in man produced degradation of brain, and hence the impossibility of a savage race rising spontaneously into civilisation; and hence, too, the necessity of gradually training their children into new habits of thought and action. But even with the best instruction it requires that higher influences should be brought to bear through successive generations before the degradation of the savage brain becomes wholly overcome, and that higher form pertaining to the brain of civilised man established in the race.—See paper by M. Gratislet referred to in the History of the Proceedings of the Anthropological Society of Paris and Anthropological Review, vol. i. p. 289.—See also Dissection of Bushwoman's brain compared with ape's, negro's and idiot's, by W. J. Marshall, F.R.S., Surgeon to University College Hospital, in the Proceedings of the Royal Society, and quoted in the Intellectual Observer, Dec. 1863, p. 387.

Mr. Marshall's views confirm those of Professor Owen. He says the points of difference between the idiot's brains and those of the lower quadrumana are very decided. Idiots have human cerebra although so imperfectly developed.

development but that of kinds, and, therefore, that creation must have been in kinds. There is a certain unity of design in the formation of all creatures having backbones, because they are constructed with a view to similar modes of maintaining life by stomach, heart, lungs, with brain, nerves, five senses, and four limbs in subserviency to the locomotion necessary to obtaining food and so forth. But to say that they are developed one from the other on the ground of their common plan is an outrage to science and common sense. What is development but the unfolding of a plan in each creature? Are we to say that the 'Great Eastern' is developed from some other steamship because there is a similarity of plan between them? There is a unity of purpose and idea carried out in the completion of the great ship. There is also a degree of similarity in the construction of all kinds of vessels formed to float, sail, or paddle on the water. But he must have a most uncommon skull who would declare in his ignorance that, because there is evident unity of design, a similar hollowing out, and a like structure of ribs and planks in all steamships, therefore the 'Great Eastern' and all other ships are developed from the same original germ, only taking different forms under the influence of circumstances by a process of transmutation determined by natural selection. A person ignorant of the facts might just as reasonably come to such a conclusion, as that various animated beings are developed from the same stock simply because they are formed somewhat on the same plan. The unity of plan only proves the

working of one mind in relation to similarity of physical conditions foreseen and provided for. Hence, to believe in the universe necessitates our believing in one God, who willed it into being; for it is one in general plan and purpose, in short, an universe.

There is a structural unity of plan between the body of man and that of other vertebrates, simply because man has to deal in the body with a physical world. There is an unity of plan—and it would be startling indeed if otherwise—but it is a plan admitting of immense diversities of adaptation, which evince a wondrous wisdom in the planning, a wisdom which man alone can in any degree appreciate; and thus man proves himself not to be classified with brutes, since he can discern the reasonableness both of a general plan and of special adaptations.

The form, movements, attitude, and general expressions of man's body are so exceptional, so superior to any other that stands upon this earth, that inconsiderate persons are astonished when they see a creature like the gorilla with any marked approximation to man's shape. Fancy fills up the outline by the same process as that by which, in the twilight, she converts a bush into a bear. But, in fact, the resemblance and the similarity in bone, body, and action, between a horse and a cow are closer by far than between man in his most degraded form and the gorilla in his finest making-up in the museum. The ape is not constituted humanly in the slightest degree. Look at that picture and then at this. Here is the object of your heart veiling her beauty in her

flowing hair—No; we will not profane humanity by the comparison. It has no tresses, no true skin clothed and defended only with feeling; it is wrapped from its birth in a grisly hide, every hair of which is fit to be worked into a felt, which the hair of man can never be. There is no sweet music in its mind, its muscles, or its movement; no harmony of thought and motion; it has no calf: it could no more dance than it could dandle a baby and sing a lullaby. And as to the intelligence of its countenance, it has neither forehead, nose, nor chin; there is no play of mind upon its features; it cannot talk either with voice or visage, except with defiance to humanity. It can neither stand nor go like man. can neither laugh nor smile, nor weep, nor blush, nor point, nor nod; it can neither make a tool nor handle one: it can neither kneel nor kick, because it has no occasion to pray nor to recalcitrate; it has nothing mentally to be eech nor to resist; tears are not for such a creature; it knows nothing of pathos; laughter is not there, nor fun, nor folly, nor fellowship. It has no need of the speaking face, nor the true index finger; it has neither the thought nor the feeling that demand their aid, and no more wants to know why than it wants a dictionary. We speak of it, for it is not a person.

As no true anatomist would confound any part of the human body with any similar part of any other body, so neither would he fail to find that the distinctive character of man's organisation arises from its adaptation to reason rather than to instinct. There is not a single organ in man's body subservient merely to in-

stinct, while, on the contrary, no part of any mere animal but shows that it is subject to a nature unimprovable, being perfectly fit for its use without training. Man, however, needs training to qualify him for the right use of his body in any of the departments of active life to which he may devote himself. The very limbs must get imbued with the learning required for the conduct of any handicraft, business, or profession; and none of man's duties can be performed, and none of his real or rational wants can be satisfied without instruction. As he alone is conscious of duties, so he alone is empowered by rational mind to fulfil them. There is even no direct adaptation between his bodily powers and the food he needs. He cannot seize it by tooth nor by nail; he must invent instruments to strike down his prey and to raise his corn. He would be the most impotent and destitute of creatures without the reason that kindles fire, contrives and fabricates; nature offers to his hand all he requires to reign supreme, but is utterly against him if that hand be not energised by an intellect to devise, and a will to work, in obedience to his wants and to the wisdom that made him dependent on his In short, animals find their perfection and enjoyment in their bodily adaptation to their habitat, while man has no place or power of enjoyment unless he Each race of animals lives in narrow limits, make it. bound to an especial habitat: man inhabits the whole round world. Where life is he is: his reason clothes him, feeds him, defends him, fulfils him. It is reason that animates his heart and gives his heart a home, because he can love as well as like, and feel the touch of kindred and of friendship both with God and man, therefore earth cannot hold him, and heaven is not too great for him. All this is truism, but it need be reiterated, since men, narrowed by false science, would fix man's place in nature, and forget that he is supernatural, for he can pervert nature, and in will and work resist the teachings of his Maker, and turn the means of good into causes of evil, perhaps for ever.

Man, then, stands apart from animals in body and in reason: that is, in action, faith, intellect, thought, moral feeling, personal habit, social relation, religious life. He, when taught, conceives the qualities of things and infers, even from his own attributes, the attributes of God. The whole ground on which we estimate the difference in mental and moral character between man and man is that which stands altogether between man and mere animals; for who but dreamers would talk of chimpanzees with enlightened consciences, gorillas of fine genius, or monkeys of good morals?

Thought makes the man, and, wanting that, the spe Looks more inhuman in his human shape; But thou, O man! a man shalt never see Till in thyself thou see Divinity.

CHAPTER IX.

SPEECH.

HAVE we too boldly assumed and asserted that man is high above all comparison with brutes in his ideation, his feelings, and his thinking? We are likely to be told this is only from our pride and our ignorance, for animals cannot speak and so cannot inform us what they feel and think; not like some men, they do not speak because they have nothing to say. We have, however, heard of one ass at least that was dumb until he had something to say to the purpose, and then he spoke with angel's voice and in a manner to teach a man and a prophet. And, doubtless, if animals possessed ideas communicable in articulate language, they would not remain unprovided with the means of expressing them. In fact, none of the voices in the world are without significance to a philosophic mind; and we need not resort to Æsop's fables to learn morals of brutes if we have the spirit rightly to listen and interpret. Nevertheless, 'the possession of articulate speech is the grand distinctive character of man."

^{*} Cuvier; and Huxley's Man's Place, &c., p. 103.

Professor Huxley adopts these words, and yet he would contradict them by strangely questioning 'whether articulate speech be absolutely peculiar to man or not?" We have not heard of any brute putting syllables together, or at least only one instance is on record giving the construction of a sentence naturally uttered by a brute, and that is in Gulliver's Travels, of which, as an Irish bishop said, We don't believe one-half. We should have better authority for natural grammar in brutes, for grammar there is in all articulate speech, if they possessed it; but as man alone thinks, he alone speaks, for words are thoughts uttered by audible or written signs or symbols. But Professor Huxley attributes the lack of language, and probably of logic, to defective organisation about the larynx and lips of apes. He adds: 'I find it very easy to comprehend that some equally structural difference may have been the primary cause of the immeasurable and practically infinite divergence of the Human from the Simian stirps.' What can this mean? The structural difference between man and the ape makes an infinite divergence, and yet the slightness of the structural difference is what the Professor so strenuously contends for, Surely, what caused the structural difference caused also the immeasurable divergence, and the idea presupposes a Power operating antecedently to the production of that difference and divergence, that is to say, the ape and the man were designed to be creatures infinitely divergent from each other and developed accordingly: a sufficient reason why they should not be classed together until

they can talk the matter over in a logical manner with each other.

We cannot believe that the ape is only a dumb kind of man, nor that man is a speaking kind of ape, and that is all the essential difference. The ape has a voice which he uses well enough for his purpose. must be something behind to which the visible difference is conformed, or why does the difference thus persist in undeviating lines of descent, man producing man and ape ape? How can the anatomist continue to assert the essential similarity of man to the ape and yet assert the infinite divergence and difference between them? If the difference did not exist in the germ and the cause of the germ, how came the infinite divergence in the development? We can only suppose there is not an essential similarity, but rather an essential difference both in origin and end. In short, to suppose the possibility of the transmutation of one kind of being into another is to suppose a contradiction in terms, a mere absurdity. How, for instance, can a creature constructed to be moved only by instinct be converted into a creature whose perfection consists in being prompted by reason? As Bunsen says, 'No length of time can create a man out of a monkey, because it never can happen; for it is a logical contradiction to suppose the growth of reason out of its opposite, instinct.'*

If it be asserted that the transmutation of species

^{*} Egypt, vol. iv. p. 54.

means only that the offspring may take the character of a new and higher species, and not the transmutation of the actual nature, it amounts to the same thing, for how can the transmission of two similar natures make a new nature? Parallel lines can never cross. short, 'the ascent of brutes towards their maximum is away from man and not towards him.' 'Every kingdom of nature, instead of approaching nearer and nearer to the next above, till eventually passing into it, in reality becomes more and more remote from it.'* There is no development of one class into another; they have different beginnings and different endings: in root and in fruit ever and alike distinct, they cannot be improved one into the other. The improvement in a quadruped is quadrupedal, not quadrumanal; and the improvement in a monkey is a monkey's improvement, and not that of a man, for man's improvement is to think better, to reason better, to work better, to worship better, and to be a better man—that is, less and less subject to the mere animal instincts which, as the epitome of nature, he has but to rule them.

Reason is improvable only by instruction, and all instruction is a degree of revelation, an unveiling of the soul to itself by making known some truth to a mind capable of being prepared to receive any and all truth. Therefore reason is conjoined with speech, because reason alone can be taught words and meanings. The claim of humanity to be immortal rests

^{*} See Life, its Nature, &c., p. 419.

on the fact that man speaks, and is spoken to, for language implies thought, and thought implies unlimited teachableness, since objects of thought are as boundless as the universe. The whole creation corresponds with reason, and speech in its fulness includes all philosophy. We cannot set boundaries to man's capacity to be taught, for our mind is of a nature to become by instruction more and more capable of apprehending the reason of things, and receiving more and more light out of the infinite intelligence. Hence, man ever looks up for higher knowledge. Wherever he dwells he forms some theory, however rude and incoherent, of his own relation to the Maker of all, some faith concerning the dependence of his reason and its connection with invisible being and spiritual power. The highest science and philosophy we have amongst us may be but folly and superstition in comparison with the truth for which all awakened minds are ever looking. In moral sense, in self-consciousness, in conscience, in the feeling of the infinitely good and infinitely wise, the human reflects, however dimly, the divine, because God speaks to humanity in all things. For man was made to be taught how to attain his own perfection. Professor Huxley, in consistence with his theory, asserts that 'a man born dumb, notwithstanding his large brain, would be capable of few higher intellectual manifestations than an orang or chimpanzee, if confined to the society of dumb associates.' If this were true, no stronger evidence could be afforded of the connection of reason with speech.

But facts do not tell us that such a human existence, even in fancy, is possible; nor do facts affirm that a dumb man would, under any such circumstances, lose his human nature. Reason would still be in relation to the eternal Logos which speaks to man not only in' words, but by every object that awakens the senses; and the eye is as much the medium of ideas as the ear, and the touch alone may tell of reason, as the pathetic and beautiful history of Laura Bridgman, and others similarly excluded from the 'sweet music of speech' and the intelligence of sight, abundantly proves. touch alone were not in itself a sufficient avenue through which to arouse the rational soul to reasonable thought, how could such men as Dr. Howe have contrived to convey to the blind deaf-mute a knowledge of eternity and the love of Heaven, as he has done? Yes; the human finger is the instrument of reason, for reason feels the meaning of its touches, and with it alone Dr. Howe has taught the blind deaf-mute, so to say, to speak responsively to his own enlightened mind, as with discourse to touch our hearts, when Laura Bridgman with her first tangible utterances spontaneously spelt out the words, 'My mother loves me!' The human soul may lie buried in a living body, but it lies there waiting only the touch of the finger that can unstop the deaf ear and loosen the dumb tongue, that it may respond with all its faculties to the Great Teacher, for the human soul and no other is perfected by the teachings of love and truth. Let light reach the eye, and words the ear, and love the touch, and reason, recognising these, will answer them aright. Impediments in the way of any force do not destroy that force, and thus the force of soul is manifest when obstruction is removed. But brutes are not imprisoned men—they need no schooling to instruct their instincts: but man is unmanned without divine and human teaching; all his faculties lie waste unless brought into relation with that discourse of reason intended for them, which teaches love and moral beauty, and without which man is a terrible being to his fellow-man. If man's distinctive characteristic be that of a being endowed with language and thought, it follows that his destiny is connected with the ultimate purpose of thinking and speaking. We know that ideas are preserved in memory, and become operative as human motives, and are conveyed from generation to generation, in words which are not limited to the uses of this world. but intimate, however vaguely, our interest is a life beyond, and in some degree prepare us for it by imparting a faith that already conquers death. reason sees the end of teaching in that religion which connects the everlasting future with the past and present, and thus begets a feeling of man's moral and spiritual relation to his eternal Source. And that science which excludes this view of man's will and thought in estimating man's place, excludes all that is really manly, and reduces him to a specimen of anatomy fit only for a museum of natural history. But as long as men do not mistake their bodies for themselves, they will look for a higher destiny. Reason, when rightly instructed, unavoidably assumes that the truths we know are to conduct us onwards to the enjoyment of truth for ever. We cannot believe that this mental, moral life, this faith, this foreseeing, anticipative energy, this inspiring, prophecying hope, full of immortality, is to find its end in darkness and in death. The antecedents must be in harmony with the coming and close future. Bending with solemn, longing, lingering gaze over the silent beauty of the dead, with whom an hour since we whispered words of love and living faith, we feel that death is an intolerable, a terrible, a degrading interference with the purposes of humanity, until the Spirit within us bids us look beyond the horizon of clouds to the home of light, where we behold a glorious anastasis, in which the divine mystery of godliness is revealed through a humanity made safe and perfect.

CHAPTER X.

LIFE, BREATH, SPIRIT.

THE simplest form of words in which the creation of a living being can be described is that a body was made and life breathed into it by the Creator. Every derived life is embodied, and yet the body neither produces the life nor the life the body. Life is that something superadded to an organised mass which enables that mass to breathe. Let us suppose the simplest body that can live—a mere cell, a monad. This is an organised creature consisting of different forms of matter in ordained relation each to other. may be a mere bag, or closed fibrinous membrane, containing a solution of albumen-an egg of the least complicated construction we can conceive. But it is constructed—that is, built up together—both by life and for life. Being alive, what is its action? Undoubtedly first of all to breathe. A breathing power is the essential characteristic of every living thing. life-gift is breath. This word 'breath,' however, is not to be restricted to the idea of merely inhaling and exhaling air through an especial organism, as by lungs. It means this and much more. It signifies also a capacity to act upon the fluid elements amidst which any living creature is adapted to exist, and that in such a manner as to draw from those fluids, whether aerial or aqueous, whatever is requisite for the maintenance of life in action. The breath is the means of interchange between the living blood and the vital air, oxygen. This action stirs every atom of the body, and is essential to the soul's operation in the body. Without it there can be no manifestation of emotion, thought, idea, or desire. As in breathing the whole frame becomes one living body, so without breath the spirit's selfhood ceases to operate in connection with the bodily life, and life and soul together depart to some other sphere. Thus, it is not a mere figure of speech which connects life, soul, spirit with the term breath; nor is it a metaphor, but a fact, to say that when God conferred life on the soul and body, He imparted it with an initial act, a divine afflatus. A body produced without birth, and complete without growth, could have no connection with breath and life but direct from Him who made it. The breath-organs were ready, and God alone could inspire the first breath by which man became a living soul. This is of course true in fact, in relation to all life; but a life underived from a preceding life of the same kind, as by birth, is a life immediately inspired by God Himself. To live actively is to breathe, and to breathe is to set all the functions of the living organisation to their work, as it will do if all the other conditions of their working be normally present. With lungs or without lungs, everything that lives thus breathes. The egg of each insect breathes as truly as a full-grown man. Some breathe in air, some in water. but all that lives and moves breathes just as the egg breathes through its shell, and would die if deprived of air. Whether in egg or seed, the act of germinating is the result of breathing. We see, then, that the idea of life as an active agency is necessarily associated with the idea of breathing. Therefore even Darwin, in order to find a first impulse for his primordial germ, demands that it should be inspired with breath. How? Simply and necessarily by saying that the Creator breathed life into it. Life is breath, with assimilative power, or force to draw out of the elements what is necessary to continued action, growth, and develop-This can be nothing less than the impartation of Divine breath, or, in other words, the direct action of the underived spirit. Life is subjected to the laws of all nature, which are those of orderly action and reaction, all the elements being regulated in their reciprocal influences for the maintenance of life. the conditions of time and space, all affinities and operations, all the laws of physics and of chemistry, all the working of Omnipotence as manifested on earth, seem to be carried out in their present order for the sake of sustaining successions of every possible form of vital activity. All the opposing energies in the vegetable and animal kingdoms, while involving the necessity of death, result in the multiplication of life, as if the production of living beings to the utmost extent were the especial purpose for which all things were made. And may not the generation of life as a force, individually and collectively, have relation to existence beyond the sphere of our senses? We cannot imagine the end of life to be the mere succession of living beings by the extinction of individual life, for is not a living being as substantial an entity as any indestructible atom of matter?

The body formed for life, is derived only from life: but organisation and life are not one. To make a body live is to breathe life into it in the making, and that act, while conferring on every organ of that body a life-power of its own, combines all the parts in one co-operative whole. A schism in a living body is disease, discord, the commencement of disseverance, death, decay, destruction of that body. This disturbance in life can arise only through some agency interfering from without, the incidence of something foreign to the life in the body. As the life-functions of the body are united by one pervading life, what disturbs a part affects the whole. The life of the body is, then, a soul, or anima, embodied, and therefore disorder of the one is disorder of the other also. Every part of the physical economy is, according to its sphere, related to the psychical; the well-being of the one is essential to the well-being of the other. Thus, whatever is not health more or less influences sensation, will, and all other mind-action: and hence, also, every ill condition of mind, from whatever cause arising, reacts on bodily function. Every wrong thought has its bearing not only on the nerves concerned in emotion and desire,

but more or less conforms the whole body to that thought, influencing not merely behaviour but the life itself. It is a disease not spontaneously curable, and is to be cured only by a power that can counteract that thought by begetting a counter thought, without which the evil becomes fixed in the vital economy as part of the habitual working wherein soul and body live together. Thus spirit-power is always evinced by its conforming that on which it acts to its own state.

Is, then, life the same as soul? By no means. They are only incorporated together, not united, but in unison-not one, but each constituting a unity for itself, one life pervading one body, and thus making that body a unity; one soul occupying that one body made for it, and thus becoming the medium of action and soul-manifestation. There is unity in the body and unity in the soul; that of the body may be broken physically, that of the soul morally. The soul is the body and substance of spiritual life and activity, that may be perverted in will and thought, which are spiritual. We can separate the idea of our bodies from the idea of our own selfhood, because we are conscious of the personal acts, willing, feeling, and thinking, which we cannot conceive as belonging to attributes of the body, all of which are physical and mechanical, and therefore adapted to manifest the soul or self physically and mechanically, when acted on by the will or otherwise in relation to outward objects. As we know that the unity and identity of the body are due to some power which built it up, and continues in it,

making it specific and individual in form and proportion. so we know that the unity and identity of the soul are due to some power which connects all its acts and experiences as consciously pertaining to one person or ego in will and memory. As the body is one from first to last, in virtue of a power acting upon it to that end, preserving its unity and identity amidst the flux of atoms and elements essential to its life; so is there some power-not physical but spiritual-which, amidst all the changeful conditions of our existence, connects all our diversified experiences in our consciousness as belonging to one selfhood. In short, the soul feels that it is ever the same being, in virtue of its constant revelations to itself by the Spirit that makes the past present in memory, and associates each current moment of consciousness with the future by an act of mind through which we attend at once to ideas already possessed and to ideas in the process of formation. But undoubtedly the power which preserves our breath-and thus the regular co-operation of the atoms of our blood in relation to the functions of the brain—is the same which preserves the soul's faculty of recognising its own existence, by an united consciousness, through all changes of thought and feeling. Hence it follows, that as a disorder of the brain suspends consciousness by arresting the flow of impressions through the senses, so the restoration of outward consciousness is a recurrence to the impressions on the mind at the time of the arrest, the impressions not being in the brain but the soul, for the mere brain can have no memory or recognition.

We are not, indeed, always conscious of living, for sleep, in which the soul is withdrawn from using the senses, is necessary for the renovation of bodily power. That the soul, however, is conscious while the body sleeps is proved by the act of awaking—for what is that but the response of the soul to the demands upon it to attend to outward things and the requirements of the body?

The connected working of the brain with the senses is due to the power of the life in them, but the power which uses both the brain and the senses, when fit for use, is the soul which derives ideas through the senses by attention to objects; which ideas, when once received, remain as the possessions of the soul that formed them, in keeping with its own nature as a spiritual being. Therefore ideas never die; however they may be hidden, they rise again to view on the bidding of any circumstance which connects the consciousness of the present with the past. The association of ideas is due to a law belonging to the existence of the soul itself; and the mysteries of memory in reproducing new pictures of the past, under the light of the advancing present, reveal the soul to itself in such a manner that by introspection and self-review it may make experience the groundwork of improvement in moral and spiritual standing. A man learns most from his own history, if only the inward record of his life be illuminated before his mental eye by light flowing over it from the source of truth-for all truth is to man the revelation of the Divine nature in relation to himself.

That there is such a revelation every man is conscious who has been blessed with a capacity to see anything of his own motives and the significance of his own wants as a being incapable of rest without trust in the love of God. As the unity of our souls is manifested to ourselves by our consciousness of oneness through the experience of all the past, so we are conscious that the Being who fills the universe with His presence is the author alike of our souls and of the knowledge by which we learn to perceive the dignity of our own being, in proportion to our conception of His perfections in whom we live. The association of thought with thought by which we feel the unity of our own existence also causes us to acknowledge the unity of the Godhead; and the sense of that unity begets the feeling of the inseparable connection of the thinking soul with its selfexistent Creator, Sustainer, and Teacher, to whom the soul must cling for life, light, and joy; since all things, all relationships, all loves, fail to satisfy but as they are felt to be modes in which the Unfailing and Eternal manifests His immediate presence and constant care.

The life that commences a living body is the same that developes it. As it is with the seed of a tree, for instance, so it is with our bodies. Life is so constituted with the seed and in it as to take out of what is appropriate around it all that is required for the full development of the tree. Thus life operates also in relation to the outgrowth of our bodies. A providence is at work towards that end. So it is likewise in respect to that vastly different power, the soul-life. Whatever the soul

may have to do in relation to the formation of a body as its substratum and abode, it is certain that when the soul is awakened to a consciousness of itself it begins to draw into it the essentials of its own growth and development as a spiritual being. The ego ipse grows normally in knowledge, wisdom, thought, love, will, faith, all produced by contacts with other beings, minds, things, facts, but produced only because such contacts are the means of exciting and arousing the energies of the soul itself. The faculty and essence of the soul thus assimilates what it needs for its own growth. according to its individual character, whether created or begotten, as determined by the will within it, cooperating with the Omnipotent will expressed in the laws of the soul-life and the laws of the universe of minds and bodies surrounding it.

It is certain, then, that the selfhood is associated with the body and yet is consciously distinguished from the body. It is certain, also, that the self, or what we call the soul, if separable from the body, does not leave it while the life that sustains the body continues in the body. Life and soul, then, have some especial relation to each other, and life would appear to pertain rather to the soul than the body, as life and soul leave the body together. We say of a body, life is in it; we say more properly of the soul, it is a living being. A body is not alive, a body cannot live—it is only an organised congeries, kept together by life; but the soul is sole and indivisible, never separable from life.

Here we are met by the question, What is life? Is

it an especial and essential force in itself, just like either of the correlated forces of chemistry and physics? Is it a transmutation of some other force, or is it a combination of forces brought into such co-operation as that they conspire together to conform the body to themselves and their working? Then we ask, What is the power that makes these forces co-operate to one end -the building up and preservation of a body by converting the elements of food into blood, and blood into the elements of that body, and so locating each particular particle in its proper place for its appropriate form and function, thus maintaining all the organs in their relative arrangements of substance, power, and action? We see this is done by a perpetual influx and efflux of materials received from without the body, and that by the life incorporated with it. The body under the sway of life is but a current of atoms more or less rapidly changing their places, but so adjusted in their passage by the life-power dwelling in the body that the body assumes and retains a settled form and proportion. There is the appearance of stability, while nevertheless the whole mass is ever flowing on and changing. There is something preserving a fixed unity in the body while the whole multitude of its atomic parts is moving. Atom succeeds atom in ceaseless change, while the body itself seems unchanged. There is, therefore, some power fixed and unchanged overruling the elements of the body amidst all their changes, and so controlling them all as to make them in their changes conform to the unchanged. What is that? We say life. But

life, as respects the body, is maintained by the very changes that it seems to control and effectuate. life, then, the property of an unalterable something that occupies the body under certain fixed conditions, and is not that something properly called a soul? And is not every living creature duly designated an animate being—that is, possessed of an anima, a nephesh, a pneuma, a spiritus, a ruach, because derived from a breath-origin, and therefore in the body existing as a breathing power? We discuss not the authority which calls every living thing a soul, nor do we argue now on any constituted difference between the human and all other souls, but simply contend that a soul is the right synonym for any living breathing thing, whether selfconscious or not, because the existence of a soul is always associated with breath as with life. Whether we regard the controlling power of life as an especial energy, called vital force, or whether we regard life as resulting from some higher energy, so influencing the other forces in nature as to constrain them to co-operate to the end of keeping a creature alive under certain conditions, it does not affect the argument as to the fact that life is the property of a soul and not of a body. It is something that may exist out of a given body as well as in it, and the mortality or immortality of which is decided, not by any inherent power proper to its nature, but simply on the spirit or will of the Creator.

How precious is life, and yet with what prodigality it is bestowed and wasted! All parental loves and instincts are engaged in extending and protecting life, and yet

the whole living world is but as the prey of life. The instincts and love of life are as strong in the devoured as in the devourers. Is not the whole mystery of life as sustained by death a reference to some higher purpose in the multiplication of life than the phenomena of life in the visible world reveal to us?

The nobleness of life, whether as psyche (ψυχή), the life in time, or zoe ($\zeta \omega \dot{\gamma}$), the life absolute, is seen in its organising power, its power over matter. The forces of the universe as physically constituted are all engaged Matter seems made for it. The existence of sentient beings is the end for which worlds are formed; and all natural animated bodies represent spiritual bodies. But what is a spiritual body? We must understand the mystery of our own souls ere we can answer that question. But we do know from our own consciousness that we, our souls, are recipients, not of matter but of spiritual things. Sensations, images, ideas, do not pass over us as reflections on the white surface of a camera; they enter in and become possessions of our being, realities of our souls, the media of consciousness to our spirits as verily as the very substance of our bodies and the organs of our senses. It is no figure of speech to say that there are chambers of imagination, memory, and thought, for what we have experienced becomes our property, being received and retained by our souls. The soul is organised in mystic keeping with our bodies, and bodies were in vain endowed with limbs and senses if the soul were not alike proportioned to employ them, and constructed to possess them. It is the soul, not the

body, that sees, hears, feels, and wills and works. Hence, whatever mutilation may happen to the body, short of that which cuts off the means of life, the inner man is a whole man still, in the consciousness of a body, how ever curtailed of power to act mechanically on material things around him. A soul can be nourished, fed, and developed; can be healthy or unhealthy, pained or pleased; it is the soul that experiences all conditions in the body; and, if the soul be disquieted, it is vain to expect wholesome blood to stimulate our hearts or wholesome thoughts to stir our nerves. We are so immured and immersed in material things as to forget our real spiritual selves in attention to the demands of the seeming selves, the wondrous fabrics in which we dwell, and which, on an atom going wrong, we may be obliged to leave to irrecoverable ruin.

But the real growth and health of the soul depend, so to say, on its mode of life, the air it breathes, and the nourishment it receives and assimilates, not in figure, but in fact—that is, spiritually and truly speaking. As the outward body, duly tendered, prospers, so does the inward soul, which is the body of the spirit. The love and truth that cherish souls are quite as substantial as any helps the flesh may need; and as a healthy body evinces a good appetite and good assimilation, so does a healthy soul. The power of soul-life in appropriating the elements of its working energy is but represented in the lower power of that life within the body. As the body is developed by the use which the life within makes of food and air, under fostering and appointed

conditions, so that other individual in connection with it is developed by knowledge and love, by communication of spirit, by what it breathes and what it feeds The life of both body and soul is operating ever under law, by which we understand the will of God as expressed in creation, and to our consciousness as moral agents. If we do not thus understand law in nature as the fixed expression of will and purpose, as co-ordinating affinities, forms, forces, and relations, with all their coincidences and crossings, to spiritual, that is to say, rational ends, our consciences become diseased. We die the death of separation from God by thinking of powers not His, to which we must be subject. die the death of fear and falsehood. Sentiments full of darkness spring up from our hearts that fall like night upon the visions of our intellect. We either become stolid and stupefied, or tremble at the terribleness of inexorable Nature, whose very life is death if her laws be not traced to Him who made those laws, not as the end but as the means of life. Thinking of our ultimatum as dependent on the laws of nature without reference to the laws of our moral being as expressed by a revelation in some way by our Maker Himself to ourselves as His, we place ourselves out of the moral and spiritual pale, and are in the region and dominion of darkness and death. All nature out of the inner sphere of the human spirit is dead, dying, or causing to die; for nature preaches no evangel to us; under all her garb of beauty and perpetual bloom, quivers full of poisoned arrows are concealed, deadly to all alike. She has no doctrine of life and immortality for individuals: they must die, and remain dead, despite all the loving instincts. No word of resurrection and identical anastasis comes from the universal grave beneath broad ocean's waves and the green swards of the earth, under the brightness of which death is still mercifully hidden.

The law of bodily life, as known to man, includes in it the limit of its duration. The machine is made to last only for a time, and the force that moves it is a measured quantity, running out faster or slower according to the pressure upon it. Whether that was the original law of bodily construction we may question. Even now the law of life is that of pleasure, health, healing and perpetual restoration to the body. But there are other laws now working under agencies at war with life. In respect to man, possibly health and safety were inherent in his original constitution, under the force of a vital law and balance of power sufficient to secure the immortality of the body itself. Whatever we infer on that point, it is plain that the law of life is the law of health, so far as it is permitted and appointed to operate on the body at present. And as the law of life is health to the body, so holiness, or healthy action of mind, is the law of life to the self-conscious soul dwelling in that body. We see that the law of life is, as Ruskin says, 'the law of composition.' As the orderly arrangement and the due co-operation of atoms and organs in the body are the fulfilment of its life-law, so decomposition, the breaking-up of the unity and concord of the body, is its death. Whatever places a particle of

the body out of keeping with the law of its life, introduces impurity, disease, death, decay. And whatever interrupts the healthy harmony of the affections and faculties of the human soul so far disturbs its moral being, and tends to separate it from the means of its true life-obedience to God's moral law. The disturbance of the law of life in the body is disease; the breach of moral law, the law of spiritual life, is death to the soul. Under the conditions of life, both of soul and body, as at present affecting all humanity, death triumphs. The law now working in all nature bids creation live but to groan. But in the very fact that we have a gospel commended to us, to our reason and our faith, as God's offspring, wherein a provision is made manifest, amply sufficient to deliver us from sin and death, as things adverse and contrary to man's true being, there is demonstrative evidence—to those at least who receive the gospel, that man's original constitution, being direct from God, had neither sin nor death in it, for the removal of these is man's restoration.

Not that we are to conclude that the body derived from earth was for ever to remain on earth. Immortality in that sense would include a narrow restriction to the law, which says increase and multiply. The earth once stocked with immortal beings would admit of no new comers, and the ever-recurring freshness which infancy adds, with all its interests to the world, would give place to a monotonous maturity. There is no restriction in the universe, and there is room for an infinite increase of human beings. And since we have heard of the passage

of men by bodily translation to other worlds, it is no great licence of imagination to suppose that as the human soul advanced in intimacy with heavenly love and truth, it would have been in the order of nature, had man not fallen, that the body, in all its elements, should have become so subject to the force of all forces, the spirit and the will, as to be fitted for transferrence to some higher, sublimer sphere, better adapted to its advance-Or at least the Will which constituted all the forces of this world, for the fulfilment of its purposes, has given assurance, if we believe the record, that those who spiritually walk with God need no subjection to bodily death, in order that the soul should find a medium appropriate to its conveyance to other conditions of time and space, the very body with which it is wedded at birth being capable of becoming so spiritualised by the spirit dwelling in it, as to pass at once, at the call of Heaven, to any other world-mansion of the universe. There is nothing in philosophy to impugn that possibility, or arraign the Power.

'Man lives not by bread alone, but by every word that proceeds from the mouth of God.' The first man was taught, in audible language, how to live. God spake to him, and gave him speech, as well as the means of life. How else could he speak or live but by the inspiration that gave words to reason and breath to life? And yet he died. Why?

But let us recur to the making of man's body—there is living truth in it, a lesson for our life from day to day.

All animated bodies are made up of certain elements,

in certain proportions and arrangements appropriate to each according to its kind. Though certain earthatoms and consolidations of air-atoms are common to all living structures, yet they are submitted and subjected to the rule of an especial form of life in each particular body. The entire substance of the human body is, like all that breathes and moves, formed of earth-elements, and is kept in vital activity and health by the perpetual transmutation or interchange of those elements as supplied by food, and converted into blood—the current vehicle of all the materials employed by life. But it has been advanced by a chemical physicist as a valid argument against the assertion that man's body was 'formed of the dust of the ground' (Adam aphar min ha-adama), that he had failed to discover any alumina-i. e., clay-in it.* Truly, it is not asserted that we should find alumina in it, but only such dust of the ground, such earth-elements as really do belong to the human body. And surely no chemist will deny that lime, ochre of iron, and indeed the whole body that can be dried and pulverised are as truly to be classed with earth-dust as alumina, which, by the way, would no doubt also be found in the bodies of Londoners, who eat aluminated bread. This, however, is referred to as an egregious specimen of the presumptive style adopted by hasty and captious cavillers, lest they should be mistaken for believers

^{*} The writer heard this argument insinuated in an address on chemistry before a large company of medical men, who, however, took an early opportunity to protest against the absurdity. This occurred at an anniversary meeting of the British Medical Association, at Bristol, 1863.

in the Bible, at the expense of their credit for science, forgetful that science without common sense is without its soul, and analyses the elements to little purpose if unable to detect the spirit of a word, and what is meant by 'ground.' Since the body is formed of earthelements having no life in themselves, their combinations could not produce life. Supposing, however, that an organised body be capable of living, just as a combustible substance is capable of burning, yet to kindle it into action the living flame must touch it. We have no idea of life but as an imparted power, an inspired energy, inducing the especial operation of the body upon the outward elements, and of these upon the body, which, while effecting mutual decomposition, shall yet conduce to the composition and conservation of the body. Life is, then, a conveyed principle—an especial motive-force begetting an especial motion. Life must have been breathed into matter by its Maker, or matter could not vitally be moved. Hence, too, a living thing is truly a living soul—an individual being, for the life-power which makes the body one is itself one, and pertains not to the body which has no life, but to the soul, of which life is an essential element. It is the soul, then-man himself-that lives and breathes in the human body. But the inspiration of man, as a soul, is still due to the Spirit-Creator; and we feel that we breathe not only air, but spirit that connects us with the life of God-for human soul-life, when most manifest, is not mere animal effort and enjoyment, but a sense of fellowship in life and will with the Source of

life and thought. What are worship, faith, the hope of immortality, the power of thinking of the Infinite, the urgency of a felt need beyond our visible resources, the unavoidable outcry of the heart in prayer for help in misery, but the higher breath of the soul by which we are perpetually connected in our expiring life with . the power of an endless life? Life and death, dust and Deity—these, if we can see what the words signify, are the ideas included in man's being as fed and furnished on earth with what he needs. Death is his by grace, as well as is his life; the body and the soul, as well as their inspiration, are God-given and God-sustained. If by any means, from without or from within, man loses consciousness of having his being in God, he loses the sense of his soul's life and life-breath. What else are we but dust, mere elementary matter, if not souls whose conscious life is God-life? When thinking of himself without God, man collapses and dies the death; for of himself he then sees only the body. But, glory be to God! as we live and breathe without trying to breathe and keep alive, so our happiness depends, not on our efforts, but on the most free gift of God, only to be received with a will as a want. We may use any gift without fear of wearing it out, in obeying the Giver. As what man calls dead matter is the sustenance of life, because he lives in using it, so whatever we do and think becomes subject to our life according to the nature of our life, whether good or bad. The good is whatever is in keeping with the moral congruity and ordinances of the universe; the bad is whatever will

not consist with universal love, and is of a nature formed to die out, because inconsistent with the law of progress, which is that of happiness. The bad is bounded by self-love, as mere love of self, which is a lonely, solitary state of heart—a deadly state, because alone; but neighbour-loving is self-expanding, godlike, because God loves my neighbour as much as He loves me, and that, being God-like, never dies, but becomes more like God as it grows on for ever. We have no right to pray for ourselves if we have not charity, which alone inspires us to say, 'our Father, forgive and give as we forgive and give.'

Not to believe in the relationship of the human soul, by some direct and especial mode of derivation from the Creator, is to feel ourselves without kindred with spirits, and left to the desolation of a purposeless existence, the sport of the elements; a part of nature appearing for a while to be reabsorbed in the inexorable play of physical affinities, to be as if we had never been, or as unconscious atoms in the revolving universe. It is because we are conscious beings, living souls, inspired by the Divine breath, in some especial manner, that we are shocked by such philosophies as that of Dr. Büchner, who would have us believe in a world without a Maker, and in man but as a passing form of physical accident, in whom love to God and man is but a pleasing mockery and delusion. With the licence of an inebriated eloquence, aiming only to be impious, and with a mad logic, without any but false premises, Dr. Büchner discourses loosely as if he comprehended Force and Matter; and while unprepared or refusing to account for his own personality and his power to question heaven and earth, he purposely excludes God and the human soul from any place in the universe, and multiplies words only to persuade us that nature is an endless consequence without a cause, having a destiny without design, and governed by laws without a will that may revoke them, or a wisdom that enacted them. A possibility of change for higher purposes towards perpetuated beings is a conception beyond such phi-The cant of false philosophers is deeper losophers. than the cant of common hypocrites. They pretend to bow to materialistic destiny-should this exist-forgetting that, if it do, they can never know. so extremely impartial, so sublimely self-denying, as to assume their own value as equal to zero, and of less significance than a grain of sand in the universe.* Truly, the way of such proud prostration is equally hard and hardening.

* Reich in Anthrop. Rev. No. 13, p. 135.

CHAPTER XI.

MAN NOT ANATOMIC.

As Science affords us no help in our endeavours to account for the original derivation of man's body, so neither does it approach to an explanation of the existence of man's mind. We can only say that the human soul, by manifesting mind, asserts its own attributes as not due to physical formation, and that reason demands our belief in the fact that both body and soul stand connected in a direct line with the first human pair, who could have no parentage but in the will of the *All-father*.

Our arguments in relation to the especial endowments of man's body will be strengthened and sustained as we proceed to consider the prerogatives of man himself, the soul, the *ipse ego*, the individual, the being who is self-conscious, and consists not of dissoluble parts. The nature, attributes, and requirements of the man himself are not matters of bone and brain, but are altogether out of the reach of the anatomist and the chemist. The question, Is there such an entity as a soul, a whole being in itself, a man not one with the human body? is too absurd to deserve reply. It assumes as possible

what is impossible, namely, that he who puts the question may be the same being as the body he uses; which is but saying that two things may be the same thing. Either the body is the man or not. If he is the same as his body, why does he call the body mine and not me? True, we also say my mind, my soul, my spirit, because in thinking and speaking of anything we must conceive an object out of ourselves; so that the ego itself, when thought of, is thought of through its qualities, and thus, so to say, separated and conditioned by the act of thinking. But who, therefore, does not still feel that the thinking being differs in toto from any other thing? We cannot but know that ourselves, as conscious agents, are individuals apart from the ideas or perceptions of which we are conscious.

It is a matter of consciousness, and every man is conscious that his body is not himself. If the body be the man, when the body dies he dies, but if not, then when the body perishes, or returns to its elements as we know it does, the man, as another entity, must be somewhere out of the body that died. The materials of the body itself are imperishable, and shall we think otherwise of that which thinks?

Men of the highest scientific attainment are very properly engaged, to the best of their ability, in endeavouring to discover the right answer to the great question, What is man's place in nature? If the word 'nature' be so restricted in its application to man as to signify only what relates to his bodily organs and their functions, we need not proceed with our enquiry, since

the anatomist and chemist long ago decided the question by merely reducing man's framework to its elements, and placing his skeleton in the museum at the head of all the animals. Will the chemist we content to define his idea of himself as merely a differentiation of carbonate of ammonia with water? Or will the anatomist satisfy himself by classifying himself as 'Primate No. 1,' in virtue of the arrangement of his bones, with their appendages of muscles, vessels, and viscera? The real question is this: Has either the anatomist or chemist anything to do with man himself? We at once reply, No. Man is a living soul, not a dead body. He is a being that cannot leave a relic or a trace of himself in his corpse, or his caput mortuum. Whatever connection might once have existed between that wonderful organism and the spirit that energised it, there is no connection now; the man is gone. The body was his local habitation and medium of action as long as he lived in it, and so far his place in nature was evident enough. He was in a body, vastly superior, indeed, in its finish and fitness for mind to that of any other known animal, but still built up of common materials on the ordinary physical principles, that, as a creature of this earth, he might use his senses and his limbs in learning the qualities of things with pain and pleasure. It requires no especial elaboration of anatomical analysis to convince us that as to bodily adaptation to a physical world—where life must be kept up with the help of heart, lungs, and stomach, with limbs in relation to their necessities, as well as to reason and

to the five avenues of sense—man's place is that of head and archon of this earthly creation. His place in this respect was never disputed; he asserts his prerogative by the superior powers he possesses, not, however, so much in the body as the mind. He stands by his reason so far above animals that his actual relationship by birth and derivation to brutes was never suspected until these days. And now, if hypothetical speculation as to the origin of man's body had not of late been so ingeniously busy with presumed analogies as to confound all essential distinctions between what is animal and what is human, there would have been no occasion to review our reasons for believing in especial creations, which determined from the first formation of man his proper and peculiar place among them.

Instead of discoursing concerning man's place in nature, which nature may mean everything occurring as if under 'the unchangeable laws of an endless cycle,'* it will be more consistent with the purpose of this volume to assume something definite as the basis on which to build the intended argument. It was, indeed, necessary to assume, as granted, that all things are created; but can it be necessary to justify that assumption? Science, as well as common sense—the common consciousness of the rational mind—assents to the assertion that this world had a beginning in an act of will, which produced substance, being matter and mind, not previously existing, except as thoughts, so to speak, of



^{*} Neander, vol. i. p. 9.

the Eternal, with whom present, past, and future, are as one. Creation, then, is not the making of everything out of nothing; it is the utterance of thoughts, the fulfilment of designs, the establishment of order, that influences actions and reactions. All things are literally rooted in the invisible world, whence all life proceeds and every substance is formed. The centre of each atom is the stand-point of Omnipotence, and all the forces are resolvable into the fixed expressions of the Will which produced them. As every force of matter acts from a centre, so also is it with the soul, and thus man is conscious of a centre in himself. Hence every action, and every thought and idea of action, is attended with a sense of outwardness and direction. movement of the body is a balancing and turning on a central point, and every operation of the mind is, in more than a metaphorical sense, a process of adjustment, by which we endeavour to determine the relation of objects to ourselves and to other centres, points, and powers, as exemplified in all geometry and all measurements of time and space, all conception of active forces. Hence, all we know of nature is resolvable into the action of forces or powers, limited to operate in spaces, that is, having centres and circumferences, according to certain laws, which can be understood only as the expression of the purposes of Omnipotence in relation to existence as at present known to man. think of qualities but in relation to forces, nor of forces but in relation to will, nor of creative will but as pertaining to an Almighty person.

If that be the case, the study of nature is an important part of religious duty, and rightly to advance that study a religious state of mind is demanded. may be that to pursue science in a merely speculative spirit, and to gratify the natural desire for knowledge, like every other indulgence for its own sake, is a danger, inducing a habit of mind akin to that of intemperance. by which the use of a good thing is forgotten in its The tree of knowledge is not that of life. abuse. Something more than faith in the facts of science is required for the apprehension and appreciation of those facts in relation to the student himself, and that is faith in the Author of those facts. Without this a man finds science but as a labyrinth without a clue, and becoming the more perplexing the more it is explored. But with this faith there is no fear lest the mind be lost in mazes however intricate, since no conclusions will or can be arrived at but such as are consistent with this faith, for what is true science but the knowledge of truth or what God has done?

It is a curious fact that scientific minds are so apt to ignore by their silence the existence of the soul, as if its existence were not as positive a reality as anything known to our consciousness. It is the very thing of which we are most conscious—that is, our own identical selfhood. But probably it is because the unity or individuality of each human being cannot be demonstrated objectively, that so little is said about it. We do not like to talk of the invisible; we cannot point to it. We

cannot see a soul; we only feel it by what it is, and what we are. Will, thought, feeling, point indeed to the conscious agent which yet cannot be an object to itself, much less to others. But as every man can and does distinguish his body from himself, and knows that it is not the body that remembers, forms ideas, and confers identity, every man in reality acknowledges that he is a soul without much reasoning on the subject, and indeed every one knows that a man is to be hurt by a word or a thought even more severely than when the body is wounded with bullet or sword. That which feels, wills, and acts, is not the body, for the body possesses distinct orders of organs, or nerves and muscles, appropriate to feeling, willing, and acting, but that which wills, feels, acts, is not divided. We mean by soul a spiritual substance or being, and by spiritual substance we mean an individualised power evinced in conditions which manifest mind, will, and operation on material forces according to its created nature. An old writer well says, as God 'applies Himself to all creatures, without dividing His unity or weakening His power; He gives light with the sun, He burneth with the fire, He refresheth with the water, and He brings forth fruit with the trees . . . so is the soul dispersed in the body, and penetrates all the parts thereof; she is as noble in the hand as in the heart; and, though applying herself to the disposition of the organs, she speaks by the mouth, sees by the eyes, and hears with the ears, yet she is but one spirit in her essence; and in he

differing functions her unity is not divided nor her power weakened.'*

Shall we call this poetry rather than philosophy? Why? Of course we cannot conceive the existence of a power that is not embodied, because all our experience is connected with the operation of power in material relations. Yet hearing, seeing, feeling, willing, are not powers of matter but through matter. But to confound the being which perceives and operates through the organisation with the organisation itself, is to confound object with subject, the means of the soul with the soul itself. A soul that reflects upon itself makes no such mistakes, but rather finds no likeness to itself in created things. Hence, Pope's bold line

Whose body Nature is and God the soul.

Hence, too, this higher thought, 'Where else should God dwell than in the human heart? for if God is in the universe, among things inanimate and without conscience, how much more ought He to dwell with our souls; and our souls, too, seem to be infinite in their cravings: who but He can satisfy them? Thus a restless instinct agitates the soul, guiding it dimly to feel that it was for some definite but unknown relation towards God. . . . The soul understands and knows that God is her God, dwelling with her more closely than creature can; yea, neither stars, nor sea, nor smiling nature, hold God so intimately as the bosom of

^{*} J. F. Senault On the Use of the Passions, translated by Henry Earl of Monmouth, 1649. Plagiarised by Pope, in his Essay on Man.

the soul. He becomes the Soul of the soul.'* 'The Psalmist describes his soul as God's only and favourite child, His darling one. So it is that joy bursts out into praise, and all things look brilliant, and hardship seems easy, and duty becomes delight, and contempt is not felt, and every morsel of bread is sweet. The whole world seems fresh to him with sweetness before untasted. O philosopher, is this all a dream? Thou canst explain it all? Thou scornest it all? But it is not less a fact of human nature—and of some ages, too.'†

Are we to infer what were the proper aspirations of the first man towards his Maker by what we know of the mental condition of savages? Surely not; but rather, as we find that there is a high style of man even among ourselves who can realise the love of God as the most glorious of their enjoyments, so we may infer that the happiness of the first of men was that of actual fellowship with Heaven in positive manifestation, the loss of which was the loss of his proper paradise and the regaining of which is his true restoration.

Sir C. Lyell quotes approvingly the unhappy saying of Mr. Hallam, that 'if man is made in the image of God, he is also made in the image of an ape.' This is not true: he is not formed to reflect the ape, and is less ape-like the more he is a man. But the body is not the man, and it is the human body that resembles in some slight degree the body of the ape; the man

^{*} F. Newman, The Soul, p. 101, &c.

⁺ Ibid.

himself, in spirit, will, and thought, is capable of reflecting the character of his Maker; and as perfect man in spirit, will, and thought, he was of necessity made in the image of God, and could have had no moral likeness to any being if not to God, who made him conscious of creative intelligence, truth, and goodness, as eternal qualities. The ape-likeness dies; the moral image is immortal.

We will, therefore, take it for granted that we are beings not to be measured by callipers and the inches on a tailor's yard. Without this concession we shall be in awful danger of misunderstanding those grand facts with which we are all familiar in the history of man; 'the burthen of the mystery of all this unintelligible world' will become intolerable, and science, logic, and philosophy will prove but miserable aids to reflection, and we shall have nothing to lead us in thought back to the bosom of our Maker, as the Being whose thought produced us, and who is revealing Himself in spirit to us by our consciousness. 'An act of consciousness is the condition of all knowledge; I cannot therefore define it to you,' says Sir W. Hamilton. know-I desire-I feel. What is it that is common to all these? Knowing, and desiring, and feeling are not the same, and may be distinguished. But they all agree in one fundamental condition. Can I know without knowing that I know? Can I desire without knowing that I desire? Can I feel without knowing that I feel? This is impossible. Now, this knowing that I know, or desire, or feel-this common condition

of self-knowledge—is precisely what is denominated self-consciousness.' Demonstrate that an instinctive act is accompanied by an *identical knowledge* with our consciousness, and then, and not till then, it will be shown that the human mind is identical in kind with that of the animal.

We will not deem it, then, all conjecture and assumption to believe with Tennyson that 'a man is not as God, but then most God-like being most a man.'* If this be not true, man's highest aspirations are but the height of his folly, and all that has ever been called Divine teaching is but delusion, then most deceptive when most sublimely beautiful and truthlike to our minds. What kindles the desire of true love and knowledge in us, but the Spirit to which by true love and knowledge we are conformed? If the nature of man is not best known by studying the best human characters as well as the best specimens of human bodies, we are thrown out from all analogy; and our reasoning will find no real basis, scientific or philosophic, to rest upon. Even on the scientific principle, man's relation to his Maker is not to be overlooked, and self-consciousness and conscience have to be accounted for as facts. conscience certainly has a method of determining congruities in relation to man's moral nature, and the faith that grows out of moral conviction has a logic of its own, without the exercise of which it is quite a question



^{*} The Buddhists have the same sentiment: 'Man's mind is divine but most divine when nearest no-thing,'—or God as distinct from matter.—Hardy's Eastern Monachism.

whether the most scientific mind would see how to look a fact fairly in the face, or discern anything of the true relation of objects, or what to look for even in the natural world. Therefore it is no wonder that, dealing too exclusively with physical forms, elements, and forces, the realities of mental being should so often be blunderingly adverted to in the writings of scientific speculatists. They are apt to forget both beginnings and ends, or to imagine beginnings without causes and ends without consequences, simply because science as such is engaged with phenomena, or appearances, superficies and sensible qualities, and not with the reasons why things exist in their differences and relations.

CHAPTER XII.

THE FIRST MAN A DIVINE IDEA.

CAN it be that the lowest form of man was the first? Can that have been the direct realisation, the nearest approximation of the Divine idea of a man? Can we conceive a higher style of man than He who made man? But it will be said all we know of man was included in the origin of man, and worked out by evolution, development, or natural selection: so that the Divine idea is not in the first but in the whole. A large idea, truly, but suggestive of large questions. Possibly we may draw conclusions from the doubtful data of flint axes in drift and peat bog, with other assumed evidences of man's connection with inferior and extinct races, mere homo-pithecoids, utterly at variance with the 'inexorable logic' of indisputable facts of another kind. Science is at present but a mental drift not yet settled into its ultimate deposit, but driven onwards still by a flood of conflicting forces tending to drift all minds into the indefinite. There is, however, nothing yet advanced which compels us to acknowledge that man was not created in perfect correspondence with his Maker. By holding to that belief, we shall be in possession of a

power capable of lifting our minds above the necessity of looking into the laws of nature for the cause and origin of man, or imagining for a moment the possibility that the modes of nature's working will account for nature's own existence as it is, including man.

Science has not accounted for any one thing yet, and the science of one age is the nonsense of the next. Our own existence itself is an awful subject of thought. It is terrible as a thing to be accounted for, and yet so utterly beyond the grasp of our faculties that any attempt to explain its origin overpowers us. We should lose our reason or our life under the weight of the consciousness of Being which was before any conceivable beginning, if in mercy we were not constituted to rest satisfied in the word 'God.' We are crushed with a sense that what to our logic is impossible is yet to our reason true. We are obliged to talk and think of objects of sense, in order to divert our minds from the thought of a Being without origin. But to account for man we must believe in God, as not only man's Maker, but as the Revealer of Himself to man; for every man capable of reasoning believes in his own creation, and is endowed with a consciousness that the desire and the capacity to know more of Him who made man is a warrant for the hope and the effort to know more.

Reason, as we have said, in these days compels all men in their senses to confess that one article of faith which is the basis of all truth and true faith; at least, we know no scientific or philosophic work now read in England which is constructed expressly to invalidate the doctrine of creation by the fiat of a Creator, except, perhaps, Büchner's Force and Matter, which excludes the Creator in right of their own eternal attributes with no will in them. We may, therefore, safely assume that man, being in existence, was certainly created in some way. Why should we ask in what way? We cannot know till we know as we are known. All we know of the mystery, at present, is that an act of creation must be the act of Omnipotent will, to which the creation of all existences is as easy as the creation of any one, but without which none could be. Man was willed to be, and he was. That is a sufficient answer to the question, 'How was man created?' and, in spite of learned captiousness, that is the final answer alike of science and of common sense.

But that conclusion does not debar us from the legitimate exercise of that quasi-creative faculty of our own minds, which, in some minute measure, may reflect, as a dewdrop reflects the sun, an image of the Divine idea. Man is mentally a constructive being, and in thought he cannot but endeavour to form a conception, by aid of scientific and natural analogies, of the process of creation by which the body of man was commenced and perfected. We are baffled at the outset: we never witnessed an act of creation, we only know that it was as easy to create the human body by one act of will as to create the universe, and no easier. Whether created of pre-existing matter or not, the fact is equally God's fiat. We may imagine a

moment when man's body was ready to be animated, the material inorganic elements being moulded together by an act of especial organising force, and yet not endowed with life, like an engine completely fitted to perform all its functions, and by its completeness showing that it waits for the power that shall inspire it with active energy. It is true that we cannot point to any instance of organisation in which life had not existed from the very germ of its development. That, probably, is the very point in which creation differed from anything which any being but the Creator ever witnessed. The act of creation was a manifestation of power which no creature perhaps ever saw or can see; the results are all that can be seen even in relation to the operations of our own wills; how, then, can we conceive the operation or modus operandi of the Divine will? All we can understand is that the forming Spirit also breathed life into man's body to make man a living soul, and that, when man arose with all his powers bound to the body and represented in bodily relation to this world, all the forces of nature were united and harmonised in his body, as now we see them, for the purpose of maintaining its functions in relation to life and mind, while the mental and moral selfhood in its consciousness and freedom asserted its connection with the Spirit that alike produces body, life, action, feeling, will, and thought. Creation and the Creator are revealed in man, the only being dwelling in our sight capable of conceiving the qualities of things and the character of their Maker. And thus man, in proportion to his power of thinking of his own origin, as a being endowed with body, soul, and spirit—that is to say, with mind, will, and power of action in bodily, moral, and spiritual relation, is, in fact, the veritable image and reflection of his Maker.

What, then, is to be inferred as to the probabilities of man's earliest condition? What the accommodation and occasions for the faculties and affections of such a being? Had he to pass, by some incomprehensible metempsychosis, through all conceivable grades of animated existence, till, after lying latent for incalculable ages, amidst the general life-struggle, he at length came forth a self-conscious intelligence clothed and enclosed in flesh, but with a limitless capacity of learning, loving, suffering or enjoying, looking up into the boundless heavens and seeking for his place, his God, his Maker? Was that the process of his creation? Or was he at once produced and at once provided for? Did he awaken to a sense of himself by virtue of some instinctive desire that became reason in endeavouring after its own fulfilment? Did some brutal nature incidentally assume such a monstrous deviation as to become a little like a man, and finding another of opposite sex having a similar tendency, establish a new species neither much man nor quite brute? Did the offspring of this new species refine upon their parents by select marriages and careful use of painful opportunities to better their position, until at length they began to think themselves immortal, and make provision for a change of worlds? Was man rendered

into man by a translation out of brute nature, or at once made man? At once made man, we answer, and as man by God endowed, by God inducted to his duty and position.

On grounds already stated, if we do not assume that whatever distinguishes man from lower beings was complete in man from his beginning, perfectly ready to be elicited, educated and employed under appropriate conditions already provided, then we 'find no end, in wandering mazes lost,' and wonder whether man had any beginning, or can have any final end or purpose in his being. The necessity of assuming the primal perfection of man will be seen in its reasonableness: what is unreasonable cannot be true in any respect but that it lacks reason: What seems true to one mind is. doubtless, often seen to be false by another, and we are ever correcting our reasoning, since increased knowledge annuls the conclusions of our ignorance, and supplies those new inferences which are more in keeping with our better light. But there are inferences that never need correction, for they are always consistent with reason; and among the first principles of reason stands the inference, or rather, perhaps, the intuitive conviction, that order is inherent in God's works. This, whether inference or axiom, implies and, indeed, expresses the fact that whatever exists has a place and a purpose in consistent relation with other existences, amidst which it is but as a part of the whole. universe is God's uttered thought, and everything. whether an atom or a world, a molecule or a man, expresses to us somewhat of that thought, more or less clearly in proportion to our knowledge of its nature and its place. Applying this to creation as at present we witness it, we also apply it to creation as we imagine it to have been in the past, and we say it never could have been without consistency, law, order; and therefore we infer that, as we find man now occupying a position distinct and peculiar in relation to all other creatures, so must it have been when humanity began.

We put aside as not pertaining to the present argument, whatever of evidence we possess, proving that there has been interference and confusion, arising either from the necessary tendency of created will to deviate from its original rectitude, or from the laws of creation, involving the possible or permitted existence of both moral and physical evil as essential to the full manifestation of Omnipotence to the human mind, as Love, the reconciler and rectifier as well as the Creator. supernatural will-power of man, by which he became capable of sinning against the laws of his own true nature, which are the laws of God, has evinced itself in what we see too prominently in human society to be denied. But we cannot suppose that man was originally other than a perfectly divine work, without a conflicting element in his constitution. This idea, of course, does not exclude the possibility of falling from that high estate under the influence of extraneous evil and the pressure of a temptation not provided for by man's innate power, but to be met only by Divine

means, through which man's relationship to his Maker should be more completely demonstrated to all intelligences.

If, in all departments of creation, and especially in every living thing, we find an adaptation in its nature, a fitness for its place, must we not believe that man, by common understanding acknowledged to be the highest type of being living on the earth, came from his Maker's hand as perfect for his purpose and his place as lower beings are for theirs? Each type of the 100,000 species of animals perfectly fulfils the idea of its nature in bodily form and corresponding disposition. Shall we imagine that man was created as an exception to the rule? As there is an idea or model in the constitution of each creature, that idea must have been completely expressed in the first, the directlycreated, specimen of each creature. And it is only in so far as we perceive that idea in the formation of any creature examined by us, that we find a sufficient reason for believing it to be the work of Omniscient and Almighty intelligence, a thing made with definite and wise design. In short, we believe in God as the Maker of all, because we discover something of God's thought expressed in everything we know, and we feel that the perfection and beauty of anything consist in its fulfilment of the idea which is one with its design and its 'make.' We therefore conclude that man was complete when first made; complete in all that constitutes his individual essence and excellence; complete as any creature can be. The idea, thought, design, intended to be expressed in the perfect constitution of man, will be precisely the likeness of the first man. But we are not capable of a full conception of that man, and our nearest approach to the formation of the necessary idea is produced in our minds by an effort to bring together in one man whatever we find most admirable in the mental character and bodily presence of the best men we know, or have ever heard of. The perfection of the first man essentially included whatever is nearest to perfection in any man; or if not, we have to account for the idea of a perfect man so far existing in our own minds either from reason or intuition.

This mode of conducting the argument before us is unavoidable. In conceiving the direct creation of man, we necessarily put aside the consideration of any hypothesis that would explain man's present state of existence by supposing his development from the germ of some lower animal, or his incidental production as the result (foreseen or unforeseen by the Maker of life and mind) of natural effort to do the best amongst an imaginary brutal ancestry. We believe in the great gulf fixed, at least psychologically, between ourselves and any brutes, a gulf not bridged over by any theory yet propounded, and therefore we might quite philosophically avoid all enquiries into our original ancestry and how we stood with 'the primates;' but nevertheless, not to ignore the disquisitions of those who shrewdly suspect themselves and us of a very low origin, occasion will perhaps be found by and by still

more fully to consider what they say. In the meantime, a few indisputable facts and circumstances, in respect of mankind in general, demand attention. The examination of those circumstances and facts will prepare us the better to think of man's place and nature. We shall see that while an awful mystery hangs over our existence,

And out of darkness come the hands
That reach through nature, moulding men,
(Tennyson)

yet the Power that fashioned man fixed a divine impress on his body and also imparted a mind to read its meaning.

CHAPTER XIII.

PARENTAGE, INDIVIDUALITY, PERSONALITY, GOD.

1. First, there is the grand fact, every living being on earth has sprung from a parentage, from other beings more or less like itself.

Reasoning on this fact as the demonstration of a law imposed on all vitalised nature, to what conclusion are we conducted but that, at the very creation of that nature, parentage was included as a condition of the perpetuation of life? And if so, every kind of living being was created at the beginning, as distinct and perfect according to its kind as any of its offspring can be. Parentage is a law of living existence as we now see it, and therefore if living existence, as we see it, is created existence, parentage of kinds must have been a law essentially in the creation at first. There is no other mode of life now but that derived from parentage, like begetting like with limited variation. This is a fact asserting itself, and any hypothesis asserting the contrary has to account for the existence of parentage as a universal law, and at the same time to prove that it is not wanted, by showing some other mode of derivation sufficient for the purpose of producing all known kinds of life. But this has not yet been done.

Certain plants may be perpetuated by buds, cuttings, and offshoots. The common freshwater polype, too, being divided into several parts, each part becomes a perfect polype. Aphides, and some other creatures, are produced from each other through several successive lives without sexes. These facts prove the wonderful diversity of operation in nature. What is a bud, a cutting, an offshoot? A new plant derived in each case from a parent as much as a seed itself. And what does the division of the polype, spontaneous or otherwise, indicate? Only that the definite form of life existing in the whole polype is also existing in every part of it, so that, as in the case of buds and cuttings from the parent plant, a new being similar to the parent is germinally formed in every enlargement or increase of its own organisation, each organised part or limb being in fact a repetition in embryo of the original or parent individual. The polype thus propagates itself by throwing off germs, at first rooted like a bud or a branch in its own stem. It is a parent in the entire sense, producing its own likeness in every additional growth of its own body, without the intervention or influence of another life. Cut off its head, and that head produces body and tail; cut off its tail and that produces body and head. There is something, some specific life-force, in each part capable of evolving the perfect animal in exact and undeviating resemblance to the parent organism from which it was detached. There is, so to say,

the spirit, vitalism, and avitism of a seed in every portion of the animal—and something more; there is the full operation of that vis medicatrix, which, in certain animals, such as the lobster, reproduces a lost member. In every case, however, like produces like, the bud being in reality possessed of more likeness to its parent than a seed or an egg, because in these there may be variation through influence of likeness to either parent more or less impressed upon the offspring. Thus a branch of a tree is more constantly like its parent tree, than it might be if it sprang from a seed to which an influence from two different trees gave origin. aphis, the familiar little green insect, the blight so annoying to cultivators of hops and roses, multiplies in an odder and still more mysterious manner. This insect increases both sexually and asexually; they produce, so to say, internal buds, which become young aphides, and this may go on perhaps for twenty successions. This propagation by partheno-genesis, and by cuttings, buds, bulbs, germs, and offshoots, secures the perpetuation of likeness to the original in a higher degree than propagation by seed, because in the case of seed there is the united influence of whatever variation may exist in the two parents essential to the production of the tertium quid. The asexual increase is, if possible, a stronger evidence of creation in kinds than even the sexual mode of multiplication, since there is no deviation in the slightest degree from the original type in the former case. We have, then, the authority and right derived from our knowledge of creation as we see it, to assert that mankind, like every other known kind of being, must have sprung from a parentage created of a nature similar to that we witness.

It is, of course, possible that more than one pair of human beings have been created. That, however, is another question, with which we have nothing now to do. But if parentage is a law included in creation, one human pair must have been created. And if it be a law in creation, it proves the completion of the creation of which it is a law. Why? Simply because that law was intended to perpetuate what was created. To suppose parentage as a universal law to co-exist with repeated acts of creation would be absurd. Production by parentage, the propagation of kinds, being included as a law in creation, it would only be for the purpose of superseding the necessity of repeating the creative fiat.

As regards man, at least, mediate creation, when viewed with the reverence its holy mysteries demand, reveals to us, even more wondrously than the immediate creation of each individual could have done, the benevolent operation of the Omnipotent will which produced and perpetuated that law. To it are due all the interests of family and kindred, all the teaching love of children, all the heavenly freshness, the almightiness of that appeal which the feeble infant makes to the living mother, on whose prepared bosom the hand of God has laid it with all its wants.

It is parentage that connects the whole race of man, as one in all its history, its joys and its sorrows, its sins, its trials, and its triumphs, from origin to end. It adds all we can conceive of foresight, provision, providence, to our ideas of creative might. What mankind is, has been, and will be, results from that Power which, with man, produced also all the conditions and circumstances by which mankind is perpetuated and diffused; in all his varieties maintaining unity of faculty throughout this earth. In short, we see that man and man's world are made and regulated by the same Mind which instituted parentage as a primal and perpetual law.

If there be advantage in the infantile experience of our humanity which none but beings born in weakness, trained out of 'the simple creed of childhood' can know; if the shadowy recollections, the new-fledged hopes that must not be fulfilled, the delights of utter ignorance and the liberty of ideas due to foolishness, make man more glorious than he could be without them, then, doubtless, the first man lost something by not being born, and passing through the feebleness of infancy, the waywardness of boyhood, and the dreaminess of youth. But is anything essential to be gained, except in a social state and point of view, by the history of infancy? That 'the child is father of the man' is no proof that the man is always, or often, the better for such a parentage. The child really teaches the parent more concerning the Divine character, as expressed in the fatherhood and motherhood of love, than any man can teach a child; and surely the human being who could inherit no thought or affection but such as should reflect the light of the life whence he

sprang was fully in a condition to experience, by direct inspiration, whatever of joy or instruction might be possible to the gradual opening of the mind to the realities of existence, where every object was fresh as the dew with an apparel of celestial glory. The newly created man was the child of God, and all that God inspires of his own humanity in any of our relationships was more really known to the man who learned nothing but of God's teaching than to any of us. Man proceeds now from birth to maturity, through means provided by the Almighty-not for the sake of making him better than he could be if directly created, but for the purpose of being taught to come to the Creator-Father for the perfection lost before birth. The testing, training, trouble, love, and triumph of the family, the first man was to know; but the sanctity had not been there, the blessedness of faith to man or woman, had not the first father and mother known by experience the personal tenderness and teaching of the Father. Man could be tempted, and fall; for he could be deceived. experience of the parental character, with its representative love as the expression of Divine charity, made it possible for man to apprehend his own restoration through one of woman born.

2. The next great fact is, that though each man is an *individual* unity and an original being in himself, he yet bears the impress in his form, mind, and constitution of his derivation. He is not only a new modification of human nature bearing in himself a character, moral and physical, resulting from the united

influence of both his father and his mother, but he also represents, more or less, in his own person, the characteristics of the race or races to which they belong. He is a variety as well as a reproduction; a link in an immeasurable chain, the first link of which, as well as the last, is in the Divine hand. He is a distinct part in a succession of lives through which the force communicated in the beginning life operates on his life. Therefore the life and purpose, the final end, intended and effectuated by the Creator in the formation of the first man, from whom of course every man is derived, must have embraced each derived man as a necessary part of the complete humanity, the whole family, intended to spring from the first man. one of us must have received all the essential elements of the first man's nature in our own, whatever may be the modifications and conditions through which they may have been transmitted to us. As the conditions and circumstances of that transmission result from the operation of the same mind and power that produced the nature transmitted, it follows that the purpose expressed and evolved in those conditions and in that nature must involve and embrace the whole human race; and therefore if it can be shown that the first man necessarily stood in any especial relation to his Maker, that relation must in some way pertain to all his descendants also.

3. Another important and most significant fact is that which is most prominent in man's peculiar psychology, the sense of himself as a person. We feel

capable of retrospection, introspection, insight, and foresight; the past is ever connected with our present, not merely as a series of remembrances, but as experiences positively influential during every conscious moment of life, as that through which the soul, the ego ipse, has gone, and which belongs to it still as actually forming both its history and its character. These are personal possessions and properties of which the inferior possessors of life, mere animals, indicate no consciousness. Hence we can never call any visible creature but man a person; man alone connects himself with the past and the future, with a feeling of their connection and of his own indissolubleness and identity through all bodily and outward changes whatever. It is a matter of felt personal blame if a man becomes aware of neglecting an opportunity of improving his personal standing as to self-respect. This feeling is different from that of conscience, which shows the evil of moral dereliction, sin; this feeling shows the folly and logical impropriety of not being informed and wise in proportion to advantages, not such a person as one ought to have been. again, the person, meaning thereby all that is permanent and characteristic in the individual, that is the object of love or hate. Love and hate are possible in the true sense only between human beings, because they are conscious of each other as persons. Hence, human love produces fellowships as well as compacts; and thus, because man and woman are persons, soul with soul may be so wedded as to become systematically and sympathetically one, more essential each to the

other than binary stars in their mutual influence. But not to confuse the idea by attempting to illustrate what, after all, can be conceived only as a reality in one's self, the fact to be borne in mind is this: every man not so curtailed of brain-power, as like an idiot or a beast to be incapable of thinking on his own selfhood or of perceiving his proper relation to other beings, is conscious of his own personality as a moral and intellectual agent, one and indivisible. Every man says I am, and thus shows his Divine relationship, however he may abuse its grand prerogatives.

4. From the foregoing fact immediately springs another. Every man refers his origin—if he reason at all on the subject—to the will of some higher personal being. Every man conscious of his own personality feels, perhaps, rather than infers, that a Person created him. This felt faith is, indeed, essential to the integrity of man's reason. Such consciousness is but a reflex action of the soul which causes every human being, who has not deliberately tried to extinguish the light that lightens every man, to own a God, in whom he lives and has his being. It is as the breath of the Divinity still moving within him, the very life of his life, the strength and spirit of the hope that is full of immortality. For what man is there in a state of rationality that expects his own personal extinction when the body dies? Reasonable man says: 'I am, and therefore I shall and must be.' Reasonable man says: 'I am a person, and I must worship a Person as my Creatormy hope, my end, my life, my God.'

164 PARENTAGE, INDIVIDUALITY, PERSONALITY, GOD.

Bearing these prominent facts of man's common consciousness steadily in mind, it will be easier to consider what was the condition of the first man in respect to the use of his senses, and his power of inferring the reason and meaning of things from their qualities and connections, as well as his capacity to worship his Maker with thoughts such as David uttered in the eighth Psalm, or such as Milton imagined appropriate to the lips of the first man—

These are Thy glorious works, Parent of good, Almighty! Thine this universal frame, Thus wondrous fair; Thyself how wondrous then!

CHAPTER XIV.

THE FIRST MAN NOT BORN A BABY-BABOON NOR MADE A SAVAGE.

1. THE first human being could not have been brought into this world as a babe—a wailing, helpless, naked, living mass of wants—without an instinct or a capacity to appropriate the means of maintaining life for an Man could not have been created thus feeble and dependent—unless, indeed, a nurse qualified for the occasion had also been created to take care of him. Then what was she? It need not be shown that an infant left alone in any conceivable paradise or place of comfort and convenience, would have been but a most marvellous failure, and the strangest of all possible foundlings—a babe created to perish if not finding a nurse nowhere to be found. No creature demands so much tending as a new-born man-except, perhaps, a kangaroo, carried in a maternal pocket till it has imbibed life enough to shift for itself. What suitable nurse is there in this world for a human babe but a human mother? Certain mythical personages have been mythically nursed: Romulus and Remus by a wolf-but wolves in general are more inclined to devour

babies than to dandle them. Though cats have suckled young rabbits, we have no authentic instance of a bereaved ape suckling a human baby.

But suppose, according to the new hypothesis, some amiable feminine ape, as next akin to the Adam, or at least the Ish, variety of vetebrate development, undertook the place of foster-mother to the new-made motherless foundling in human shape. Could not she have done all that was necessary? That is an experiment not yet tried by the Zoological Society. We wonder why not, seeing so many babies in these experimental, philanthropic, Christian times are born of mothers that evince less motherly affection than any of the brutes. Have not apes been found ready to adopt babies? If not, why not?

We are out in our science and philosophy. The Darwino-Huxleyan hypothesis requires not the nurse only, but the veritable mother of the first man, to have been a paulo-post baboon of the missing-link variety-neither man nor ape. Well, say there was a baboon, once upon a time, who (?that) became so very refined and superior to her ancestors, that by dint of natural taste and nice selection of companionship she brought forth a something tending to become a man-child. Perhaps the force of imagination may have had something to do with such a supposed result; and we know, humanly speaking, imagination is very strong in the production of hypothetical oddities. But even imagination must have had some reality, some received image, to work with; and really we see not how a baboon

could have conceived a man, even in idea, since we have no evidence that even a lady baboon has any imagination at all. But did the wish become the father of the thought, and the thought become the father of the new pithecoid humanish progeny? Even this cannot be admitted till we know all the possible force of a wish or a thought in any kind of ape, since no apes known to us have any wishes or thoughts to speak of, being content to continue only apish—they know not why and care not wherefore.

But say that some such simian of the gentler sex, whether sentimental or otherwise, did find herself in the interesting condition supposed, can we also suppose any conceivable baboon, any possible link between primate No. 1 and far-off primate No. 2, endowed all at once with instincts exactly adapting her to bring up her unaccountable baby in a becoming manner? It must have required especial, consistent, and patient teaching and training to establish the young gentleman in the habit of walking uprightly, where the influence of example was of necessity entirely wanting or acting all the wrong way. Being born with a real foot, which, for an ape, would be a lusus nature, such a mother would be more likely to insist on his going on his toes and his knuckles; but how he could have followed her into trees when he began to feed himself is a mystery. He had a foot to stand on, but therefore very unfit for clutching, climbing, and jumping from branch to branch. She must have been more uncomfortable with such a son than a hen with one chick, and that a duckling.

Or if we imagine the bantling as to the foot only in a state of transition with the hand modification still betraying his descent from his quadrumanal parents, to walk erect as the monarch of all he surveyed was a startling achievement. But like St. Denis, who, in the legend, walked so well without his head, the first step would be the chief difficulty in the way of progress.

We happen to be utterly unable to indicate any probable period in the long æons of this world's geologic record when the ape became a person—that is to sav. conscious of himself as having become a man. But 'we may conclude that by the extermination of the lowest types of humanity, the gulf between man and the ape has been widened. When the separation between man and ape became sufficiently distinct to prevent interbreeding cannot be ascertained.'* We should think not; but by all means let anthropologists who expect to ascertain this interesting turning-point in their own genealogy continue their researches. men so intent upon truth will at length be satisfied, if they can but find facts enough, and know how to read them.

We must dispose of especial instincts, which imply especial organisation, before we can dispose of specific kinds. None of the instincts of lower animals, monkeys included, will meet the wants of man. His instincts themselves are human and subservient to reason, not

^{*} Quoted in the Anthropological Review, July 1865, p. 222, from Isis der Mensch und die Welt, by Raderhausen, Homburg, 1863. This work consists of 2,250 pages.

sufficing even to preserve life but as they are rationally exercised. Every creature's instincts bind it to continue according to its kind, tending only to preserve and perpetuate its characteristics; and therefore no mothermonkey, or what not, ever yet had the instinct to train a little monkey, or what not, into a little man, except perhaps in Æsop's fables and the pseudo-philosophic rhodomontade of these days. The theory of transmutation is only a theory of displacements; but as we do not find any living thing out of place, except by mistake, we may suspect the theory itself to be in that predicament, and have nothing further to do with it.

2. As the human being could not have been produced as an infant, so neither could he have been a savage man. Why? Simply because it was impossible; for a savage is a result of man's degradation. acquired savageness, but there is no example before us of a savage ever having learnt from nature, without other teaching, spontaneously to elevate himself into a civilised man. How, then, could civilised historic man have sprung from a savage parentage? Every savage in Australia or Andaman Island is what he is from acquired habits founded on knowledge of savage life; and to suppose a man like a savage direct from the hand of the Creator is to suppose the Creator making a man, and endowing him, not with what is manly, true intelligence, but with false ideas of everything about him, and incapable by any of his gifts of correcting his false ideas without an instructor.

A savage is not a perfect man merely without

experience, but a man debased in brain by the inheritance of defects and perversions of nerve-action, derived through many generations of men degraded by habit from the dignity of reason; and a savage tribe is to be recovered and raised into a right social and civil standing only by better influences brought to bear persistingly on all its minds, by any means that can influence intellect ingrown awry, but especially by the education and employment of children. Thus, in the course of generations, ancient Britain has become Great Britain. though still with many elements of savageness in the slums of her cities and the back settlements of her districts where the habit of moral training, to the disgrace of our so-called Christian institutions, has not reached or taken root. The recovery of true civilisation is the recovery of lost truth and religious thought. Its recovery, therefore, must be a vastly slower process than that of its loss. The problem of recovery is indeed involved in the revelations of that Power by which humanity is so constituted that the habit of evil not only grows into a man's nature with an unalterable bias and an indelible stain, but is stamped as his image upon the very framework of his offspring—a fact that adds tenfold force to the familiar words, 'Can the Ethiopian change his skin or the leopard his spots? Then may you also do good who are accustomed to do evil.'

From analogy we are constrained to infer that as every kind of living being is formed on a type, model, or idea, and must have been created perfect according to that model or according to its kind—if living beings

were created in distinct kinds—so we must believe that man was, as a distinct kind of living being, created perfect in body and mental capacity, in fulfilment of that idea, a perfect man; or else we must suppose the Creator directly making an imperfect attempt to fulfil his own ideal, which would be alike blasphemous and absurd. We therefore cannot avoid the conclusion that man was created with a perfect body for the use of a perfect mind, that is to say, with all his senses, reflex powers, instinct, and reason complete, with a brain best adapted to the fullest manifestation of mind, and with all the aptitude of muscle, nerve, and life, by which sensation, thought, and will, might work together for human purposes, in relation to an accommodating world and a place prepared for man.

Let us consider what this idea involves. His senses are perfect, his brain is perfect; he receives perfect impressions of the objects of sight, for instance. Yet a man with only this amount of advantage would be as incapable of preserving his own life as a babe. For what is the truth with regard to all we know of and from the senses when most perfect? The mind must be accustomed to their use; they misguide us without experience; they require long use before we can draw correct conclusion concerning the properties, proportions, distances, and relations of objects to each other, and to ourselves. Before a man with perfect senses could be so far educated by experience as to employ them for the sustentation of his own life, he would infallibly be destroyed. What, for instance, is there in

the eye before it is trained by experience to prevent a man from falling over a precipice? When a man born blind has his sight conferred on him, as in the wellknown case operated on by Cheselden, all things appear equidistant from the eye, and it is long ere it becomes so educated by experience that the mind draws right conclusions from its use. If this be true in respect to the organs of sense, it is equally true in respect to the faculties connected with their use in purely mental operations. The first man, therefore, endowed with perfect brain and sound senses, must have been still further endowed with especial intuitions or assisted by special instruction, awakening reason to a more rapid apprehension of the relation of objects to himself. labour under defects of reasoning power which he did not experience. His senses were created in such perfect harmony with his mind, that, being instructed, he could learn from them at once whatever they were intended to teach. No pre-existing bias distorted their impressions, and the ideas intended to be induced by objects in the soul of man, made perfect on purpose to obtain from God's works a knowledge of their Maker, could not fail to be formed in their right order. To a man thus intuitively conscious of his own personality, there must have been the expression of meaning as of a mind addressing his mind in everything he saw, heard, or felt. The light filling the heavens and clothing the earth with glory, causing him to perceive the outward world as if in contact with his soul, as far as his eye could reach, meant to him the presence of the Revealer.

His own spirit was but as the reflection and response of that presence, and therefore the light directly spoke to him of a personal being, a power, and a will, inviting him through that medium to look for intelligence wherever the light fell, and to see in it that He who made it was Himself Light, that is a Being ready to make manifest to man's mind whatever was essential for the satisfaction of his reason and his heart. If we can think this, surely the first man, necessarily endowed with higher intuitions than ourselves, would also have thought this. You say we are taught so to think. Well, but how taught but by being directed to thinkas the first man thought-of the thing itself? The intuition of our reason is such, and the open, clear, plain nature of light is so correspondent with the nature of our minds, that being duly attentive and able to ask the meaning of light, we cannot but think of it as a manifestation of a Will that utters itself as alike Intelligence and Love. But what love? universal love-the love that binds worlds together in light, and orders all the atoms to minister to vital joy. And had the first man seen what men call death, it had not been a terror, but a revealment of transition, as a necessary means of progress to perfection; an enlargement of all the kingdoms of life-not by the extinction of one to make room for another, but a perpetual extension of the seen and temporal into the unseen and everlasting, where time and space are not conditions of existence; but where the real is what the spirit is, unhampered by limited locality, and free to find its

fellowship in all the infinite, if all can be where the end is not. Bodily, death belongs to a world too small for life's full operation and enlargement; but to the spiritlife of man there is no limit, because God's power and kingdom are not hedged around with nothingness, but with the inconceivable, which is ever full and yet ever filling, because for ever enlarging without limit. Therefore we conclude that the model man, perfectly endowed with logical power and intuitive appreciations, could infer quite as much from what he saw as we can. a personal being himself, he could be in no danger of confounding nature with its Maker; his very constitution of spirit obliged him to think of everything definite in its purpose as the production of a Being exercising power, will, and design. For the same reason every unusual, and far more any mysterious occurrence in the realms of nature, assumes to man's unenlightened imagination the character of a portent, a warning of something doing, or about to be done, by some personal agent acting behind phenomena. then, the correct definition of a wise man is interpres nature, expounder of nature, are we to suppose that the man for whom there was no companionship but as he could perceive the thoughts of his Creator towards himself, had a mind less capable of interpreting appearances than a modern philosopher, the utmost extent of whose knowledge amounts to no more, at best, than acquaintance with nature and reflections on the properties of things, partly observed by himself, and partly learnt from other minds. The philosopher's interpretations, now, as of old, are, and ever have been, nothing but mistakes, where he has not thought of seeking to learn the intentions of the one master mind, the Maker of the universe, in whatever He has made. then, faith in God as the Creator of all is requisite to the perception of the congruity and consistency of nature, we cannot imagine for a moment that the man who knew nothing but as God Himself instructed him, was worse instructed, or worse endowed with capacity to receive instruction, through the lack of faith and intellect, than any of his descendants. To conceive of man at all as the direct work of an Omnipotent person, we cannot but think of him as the mental and moral image and reflection of his Maker. It is so now in all right-minded men, and must so have been from the beginning. As Sir Thomas Browne nobly says, 'While I study to find out how I am a little world. I find myself something more than the great one. There is surely a piece of Divinity within me. There is something which was before the elements, and which owes no homage to the sun. Nature, as well as Scripture, tells me that I am the image of God.'* In short, reason informs us that man's Creator must have revealed Himself humanly, or personally, to the first man on the opening of his faculties, and the possibility of such a revelation presupposes the existence of a fitness in man's mental nature to receive that revelation, which is all we can understand as to a correspondence between

* Religio Medici.

176 THE FIRST MAN NOT BORN A BABY-BABOON, ETC.

the Divine and the human. It is thus only that man is the image of God: a similitude destroyed, or broken, by whatever interferes to hinder man's reception of teaching from God, and restored only by the renewal of that spirit within man by which he is brought again into correspondence with the mind and will of his Maker in a personal manner, to live with

That God, which ever lives and loves,
One God, one law, one element,
And one far-off divine event,
To which the whole creation moves.

TRNNYSON.

CHAPTER XV.

MAN'S FIRST VISION.

THE Word that uttered Light spoke thought towards the coming man; that word on which hang all the worlds, included the end in the beginning. As the life that forms the germ is fulfilled in its perfection, so the primal day-dawn of this earth foretold a finished work in the creation of man. As that which makes visible to sense is the type of that which reveals to the soul, so the first recorded act of Divine energy in becoming light necessarily called worlds of minds into existence to be manifested to each other. Thus the excellence of all harmony, order, law, beauty, use is brought forth with light which means to man love and intelligence, the everlasting revelation of God in human nature.

The small ray of light that on the retina photographs a vision of the starry heavens for the soul's insight, is as the centre of the infinite. Thence proceed radii that reach no circumference; thence begin the paths in which the spirit may travel from this moment and this point on and on for ever to find no end, no rest but in the Eternal One, a Presence everywhere. Thus the feeling of time and space becomes a feeling after God,

which cannot be satisfied till we know His mind towards us. It is no false sentiment to assert that the full significance of light to us is the manifestation of our Maker. This Plato felt in feeling after God; this, too, was he who leaned on the bosom of Immanuel taught by the same spirit to say God is Light. The genesis of man's world truly begins with light, in anticipation of all philosophy, foretelling man and the revelation of Divinity to man thenceforth for ever.

We will not discuss the omphalos, for it had no necessary place in the first man, who was complete without derivation from birth and the processes of development. He was a circle in himself with no mark upon him of connection with another; but yet we may ask At what apparent period of life was the first man created? Was he produced as if in full maturity, an adult man, or as a child or a youth? These curious questions we have no means of answering, and concerning them we may speculate as may best comport with our notions in respect to the provisions made for man's accommodation, the training to which his faculties of mind and body were to be subjected, and what especial providential aids and interferences on his behalf were to qualify him to become master of his position as at the head of the organic and animated earthly hierarchy. It will best suit our purpose here to assume that when awakened to selfconsciousness and made aware of the presence of other beings, he was as a youth verging upon the commencement of manhood; just when the mind is most sensitive to the stir of life, most alive to beauty, most desirous of knowing the meaning of things, most apt to learn of the light that love is its import, most demanding the guidance of a superior mind to direct and satisfy his reason, most susceptible of sympathy with a loving heart, most reliant on the Logos and the Reason that bring to him the truth he needs, to instruct him concerning his own origin and the place he is to occupy in the marvellous world of life and action amid which he finds himself. In such a period of youth it is that the divinity in man's soul speaks out its demand to see truth and love face to face. Such a youth was present to the mind's eye of Leonardo da Vinci, when he pictured in marvellous intelligence and beauty the God-man beaming forth upon the bewildered doctors of the temple with a searching light beyond their power to meet. His first requirement would be the presence of a being apparently constituted like himself, a fellowman with full ability to sympathise with his demand for knowledge while conferring it.

Could a physiologist now examine the body of a person thus produced by a direct act of creation, having the appearance of such a youth as we have supposed, would he be able to discover by any evident signs existing in the bodily structure of such a person whether he had been born and developed or not? Certainly he would not; the act of creating a youth would be the act of creating all the signs of youth, with all the *prochronic* indications present as if he had grown to that condition. And what would be true of the body would be true also of the mind. A

metaphysician with the like opportunity of investigation would have found the mental faculties and affections advanced into the youthful period of their powers with no other deficiency than would arise from lack of instruction and experience. As yet all the forces on which the intricate functions of life and mind depend lie quiescent in their places, but ready to energise each particular organ in response to the agencies in co-operation with which body and soul are created, to evince their inherent powers. All heaven and earth are correlated to this new being. The Spirit that forms, fills, and regulates all the atoms of all the worlds, has in the constitution of the universe arranged its forces from the beginning in anticipation of the creature now fashioned by that Spirit in correspondence with Himself; and, unless inspired with the breath of the Eternal Life, that human being, body and soul, would be but the one unmeaning being called into existence, for man is without a purpose if not in personal relation to his Maker. A mind to perceive wisdom and to feel love is created a contradiction to that wisdom and love, the Almighty Source and cause of all things, if not intended for fellowship with love and wisdom, at once and everlastingly.

Now let us imagine the soul awaking as by its nature answering to the touch of light, opening the inlets of all knowledge through the bodily senses. Body and soul being wedded together in a union so intimate and consentaneously exquisite, that to discover whether this or that be first stirred to action, would defy the pryings of

philosophy. That we have no consciousness of our own existence, nor of the agencies that act upon our bodies, but because the indwelling spirit is ever ready to respond to the impressions received through the organs adapted to the uses of that spirit, is matter of experience in our daily resurrection from the slumber of the night. Thus may we imagine that youthful being gradually arousing as from sleep, and by slow degrees becoming conscious of his own selfhood amidst the beauties of a paradise prepared by the hand of God to greet the senses of the new-created soul. Let us cull what we can from the poet's fancies of the shadows and the sunshine dancing with the dewy flowers that tremble in the gentle air, or scattering brilliance of all hues upon a flowing stream, whose wavelets utter a glad undersong as they play with the reflected lilies peeping over the green banks as if rejoicing to feel their own loveliness in the general stir of life amidst the tranquil light. The leaves of a balsamic tree throw the shadows of their tender tracery upon the serene brow of that first human face, now but beginning to speak forth the dreamy peace of the breathing soul. The living zephyr, bearing mingled perfume on its wings, moves the golden hair upon that brow, while the whispered music of distant birds, and the hum of insects fluttering in burnished azure, green, and gold, with the blossoms all around, steal softly on the soul through the opening ear, and a roseate glory wakes attention in the lucid chambers of the eye.

Nature is made for man, and God is man's minister.

A world untouched but by divine and angelic hands lies fresh before the senses of this embodied human spirit. Both body and soul are accommodated by outward nature, and all nature is adapted to their powers. body is formed to evince as well as to inform the soul. Will and thought are called into action by sensation, and fulfil their functions in the wondrous organisms fitted to consent to voluntary movements and to assist the soul in attending to the impressions impinging on the senses. The mental faculties correspond to the means in the body adapted to their exercise. objects of nature, with all their marvellous variety. arrangement, and relation, seem formed on purpose to meet the demands of the mind and promote the full exercise of rational endowment. The soul knows nothing of itself but from self-consciousness, a feeling of oneness in the selfhood amidst the variety of its impressions and its powers. But the soul has the faculty of becoming as well as of receiving; it produces an ideal out of and apart from the actual world; it infers the unknown from the known. The selfdetermining will demands instruction beyond what the senses furnish to the intellect. Moral judgment has a basis beyond the senses. The soul must know the will of God, that reason may stand in faith upon a foundation above things; and thus when intellect is illumined to the utmost by the knowledge of outward nature, the soul only more ardently thirsts for direct acquaintance with the mind of the living God.

We see a youthful being, perfect in form and faculty,

but as yet not a power of soul or body is called into voluntary activity; here is a man that has known no infancy, without memory, and, therefore, without imagination. Ideas are all to come. The breath of God, the breath of life, is but now bidding the first human heart beat responsive to the vital touch that formed and now plays upon its chords. Thus, the spirit, the selfhood, and the will, inhabiting that body, are roused into spontaneous activity, while the body itself obeys the moving mind, as if instinct with the individual energies of the innocent soul that gives it animation.

Though we are all cognisant of our individuality and are prepared to call each other souls, it is long before we learn to separate the idea of our selfhood from the body which it actuates. We seem while the body continues in healthy subserviency to the mind's behests, never to feel ourselves to be souls or spirits; nor until we have acquired a high power of abstract thought, or are constrained by bodily incapacity for enjoyable action to seek our comfort by appealing to the Parent of our humanity, do we attain the full consciousness that we are ourselves spirits, and as such directly sustained in the hope and energy of faith by God Himself. Till forced by our necessities to speak in prayer with heaven, we do not realise our connection by birthright with the invisible world and the source of power. But that human soul we contemplate, when first conscious of itself, must have felt as if the whole world were but another self, full of a will put forth to act upon him. So is it in the childhood of

our being; everything is alive and wilful as ourselves, until experience tells us better. The fetishes of ignorance are everywhere. Our consciousness of ourselves is not complete until we begin to reason on the origin of our own existence and the nature of our wants, as intelligences demanding a provision for a perpetuity of life. We close our eyes expecting to-morrow, because we have known successive days. We daily wake with memory and recognition of the past made present, and we cannot imagine an awaking without them. But here is a man as new to consciousness as a babe just born. It is as if a man, in innocence and utter ignorance, should at once be ready to seek the meaning of every impression from the objects of the world, on which it has but this instant entered. Each impression at once begets an image, but without an analogy; it means nothing. The spirit of the man is but that of a child, with all to learn, yet capable at once of learning all, if only its reason be met by a competent interpreter. Can nature teach such a soul all that it needs to know? No. Though the human spirit be indeed constituted with faculties in correspondence with all the objects of the universe, as if that spirit were created for the universe and the universe for it, yet the soul of man knows nothing but appearances, and reads all phenomena erroneously until instructed humanly by some person possessing the requisite intelligence to impart truth concerning the relations and connections of things. All true knowledge is so much divine revelation. No created being learns more than it is taught to learn. Hence the world by wisdom knew not God. Hence every tribe of man lies at the mercy of delusion and of ignorance where the voice of revelation has not reached, or where the lingering echoes of traditionary truth are lost or neglected amidst the urgent eagerness of men to satiate their souls with sensualities, or quell their fears by worshipping the objects of their dread.

Shall a human being, fresh from the hand and living in the life-breath of his Maker, be without a teacher? Shall a being as yet without hope, fear, fancy, in whom the faculty that records impressions has written nothing yet upon the tablet of the memory, and in whom no power which arouses reason has yet begun to operateshall such a being be left alone with all the unintelligible world, with all the burthen of the mystery concerning the past, the present, and the future, and no one to instruct him? How shall such an embodied spirit acquire ideas from unreasoning nature-ideas from which to infer aright his relation to other beings, or come to understand the uses of the creatures on the right use of which the preservation of his life depends? As man, his instincts are insufficient for his guidance. He must learn to reason to be safe; and reason means dependence on experience and instruction. Therefore all paradise had been but waste and meaningless munificence of good, unavailable to man till some personal teacher, knowing all that man required by his bodily and mental constitution, should smile upon him there, and by example confer upon him knowledge that by

degrees should result in independent power of reasoning. Man's first want, then, would be to find a fellow-man, or a being in human form, to communicate intelligence by actions suited to his faculties and sympathies. course of reason, the gift of language, was demanded by the very constitution of man's mind. And who but THE FATHER could teach man? What angel but the angel of the covenant, the Logos that was in the beginning, was the human manifestation of God to man? required not only the knowledge of his heritage as the first-born and primate of earthly creation, but also the love of the Author of his being; for man to learn all things save the personal love of his Maker were to be less than man, whose soul in innocence could find no centre, and no rest but in Omnipotence revealed as Love, and therefore Wisdom.

The human face and human voice alone speak to the human heart responsively. Without smiles and the music breathing from the face in harmony with uttered sounds, every infant would grow up as blank in soul as an idiot. As woman's face, if her heart be true with her God, is radiant with love as she looks upon a babe, and watches for an awakening consciousness that shall smile a response, as face answers face, so the first man's soul met a countenance human and divine at its first awakening. The Giver of all love was there in whatever form the tenderness and tendering of love was needed to draw out the innocent full heart of young humanity, and guide the confiding spirit into the full enjoyment of thought and feeling, in fellowship with

that Heart which is the fountain of all the love and light overflowing all heaven and earth, and which shall ultimately and for ever obliterate the work of sin, that God may be all in all.

How can we do otherwise than assume as true the only imaginable mode of human initiation into the knowledge of origin and end; the only mode that has commended itself to the universal reason and judgment of mankind in all ages; the only mode that satisfies the requirements of the occasion, namely, the direct personal instruction of the first man by God in human manifestation? Thus alone could man be assured of his relationship to the Eternal and Divine. Without this assurance, humanity, even as it is, would be an anomaly and a contradiction; for if man is not intended, and divinely taught, to feel his relationship in spirit to God, then is man greater in thought, hope, faith, however imparted, than in the idea, purpose, and plan of his Creator. If humanity be not the image and reflection of Divinity, then man, at his best, is nothing but a spiritual monstrosity, a lusus naturæ, in which not nature only, but all we know of God and man is an aimless chaos and confusion. Were heaven and earth, with all their powers, but manifestations of Omnipotence at work without an end or aim in relation to the only being that can look onwards into the eternal future for his own eternal standing? Where, then, the fulfilment of the prophecies inspired in his own heart, the meaning of the present and the past, the reason why man has ever been permitted to exist and to think of immortality,

of holiness and God? The answer to all such questions is this: the human soul is the predicate and proof of God's relationship to man, and as surely as the human mind is inspired to believe in limitless power, love, and wisdom, so surely in proportion to man's confidence in God does man expect to inherit the everlasting outflow of Divine beneficence. But of course the reverse is also true; with the forceful spite of a perpetual ill-temper, to believe in God as an omnipotent tyrant; for ever disappointing us with His thwarting purposes, is to dread and hate Him, with desire ever to hide from His presence, while to believe in mere power as working without will, good or bad, in all nature, is to feel at the disposal of the natural forces, with no remainder but to submit with what indifference and stoicism one may to the inevitable, with no God to thank for the past or to trust for the future. The first man's first vision could have been no other than the smile of God, seen as on a human face to speak of love to be relied on.

CHAPTER XVI.

MAN'S FIRST PLACE.

It is, perhaps, a curious rather than an important question as to where man was first located. man as we find him, it is evident that, as regards locality and habitat, man, unlike any other creature, is to be found in every habitable region of the earth. Wherever there is life he lives. While other living beings are, by the necessities of their constitution, limited in their range, man ranges everywhere. the 200 species of monkeys, for instance, and we quote them as nearest to man in bodily structure, scarcely any live naturally beyond the tropics. Moreover, the different species of monkey never mingle, but man multiplies in all climes, and there is no variety of the human race so far constitutionally at variance as to be debarred, as far as we know, from fruitfully commingling with any other to produce a new variety. Even extremes of race are known to mingle; but the natural admixture is not between extremes but approximates. Thus, Africans blend with Africans from the Cape to the Mediterranean coast. But doubtless an Esquimaux with a Negro would be a mixture that would have a hard

struggle for existence. While these facts afford strong evidence of the unity of mankind, they also show us that, as far as man's power of living in any climate is concerned, he might have been created in any part of the earth. But certain localities are more congenial to man's full enjoyment of life than others; and, as we suppose man in his perfection was not left to struggle for life as soon as he was made, we reasonably infer that he must have had an appropriate and most accommodating place prepared for him. Where, then, was it? The streams of races, of languages, of tradition, point to a centre in the East as the earliest seat of man as at present existing on the earth. It is therefore reasonable to conclude that, whatever changes may have taken place on the surface of the earth, the first parents of mankind dwelt somewhere in that direction. We have seen that Oken. as a mere philosophical speculator, assumed that the neighbourhood of the Himalayas was probably the region of the veritable aborigines whom he makes in imagination out of sea-mucus, with very savage propensities—probably derived from a long line of beastly Probably he would not object to a more antecedents. western locality, and might even adopt the Caucasian mountains—as others, on scientific principles, have done—as equally adapted to fulfil the demands of the theory which seeks an appropriate climate for the spontaneous production of man from mucus. We, however, do not require conditions suitable for the production of man out of a stray spawn, so we shall not look for them. We think the production of man sufficiently provided

for in the Will of his Maker. We only want to find a locality best suited to meet the necessities of man, constituted as he is. It is rather remarkable that the very philosophers who suppose man by degrees developed into, or at best created, a savage, also suppose man first produced somewhere in the neighbourhood of North-Western India, because we still find there the highest type of man—men and women of the finest mould. How the two ideas—the lowest savages and the highest style of man—comport, it is for the said philosophers to determine.

As to man, it is easier to imagine self-degradation than self-elevation. What is high, when left to its own forces, soon falls lower; but that which is low never becomes higher of its own accord. Humanity is never exalted but by an extraneous power. It is always either drawn up or driven. We readily acknowledge that comfort and abundance foster the development of man. If his passions are not too strongly at war with him, the finest specimen of man will be found in the land that most favours his growth; but we cannot determine where that is, nor how far his bad habits of mind and body might counteract the fostering influences of nature.

The locality indicated, however, will very well answer the purpose now in view—to find a place adapted to the convenience of new-made man. The study of climatology conducts us to this region, as uniting in itself all the conditions most favourable to the proper supply of man's wants, to the exercise of his faculties, to the cultivation of the ground, and the production of whatever

man can make subservient to use and to enjoyment. We seek a paradise, and here we find it ready made, though, indeed, a Miltonic imagination will require a better for pure man.

The centre of the diverging migrations of man is probably, then, in or near the beautiful Cashmere of which the poets sing so rapturously.

All the great features of nature are there found in their greatest contrasts of beauty and sublimity. In drawing a circle with a radius of five hundred miles around this centre, we include all the climates of the world. In its mountains, table-lands, lakes, and valleys, with rivers roaming amidst grandeur and loveliness and descending through wide sloping terraces, clothed with every form of verdure, of bloom and fruitfulness, and affording easy access to the ocean, we find almost all that makes the earth rich, grand, and glorious. Indian tradition, or rather what assumes the form of history, as expressed in the Vedas, probably written about 1600 B.C., actually fixes on Mount Meru, on the borders of Tibet and Cashmere, as the first abode of man.*

From the above date, according to received chronology and traditions, less than a thousand years had elapsed from the Deluge; and in the mere fairy tales of the English, the Germans, the Welsh, and the Armoricans, many of them of the same Eastern origin, we have proof that the story of the most trifling events may outlive a thousand years.

^{*} See Sir William Jones, Ritter, and Colebrook.

Nearly every variety of plant and animal cultivated by man in Europe and Asia is found wild in the region indicated. Four rivers—the Ganges, the Brahmaputra, the Indus, and another that flows into Tibet, arise from Mount Meru.

Michaelis translated Genesis ii. 10 thus: 'Four rivers flowed out of Eden, and they separated continually more and more widely from each other.' Moses says that man's first abode was in the East (Gen. ii. 8). Armenia is in the north from Palestine, so that Armenia could not have been supposed the seat of Eden by the writer of Genesis, if he wrote in Palestine. The Indian tradition, then, so far agrees with the Hebrew account. But perhaps Meru is the real Ararat, a name that simply means a mountainous region.

It is quite possible that the exact spot which may be called the cradle of mankind is in that fruitful region known as Keind, which the Iranian (or Aryan) nations call Behesh or Paradise. It is said that extremely ancient remains of the most impressive splendour, primeval ruins of arched avenues, colossal statues and temples are found there, which cannot be traced to any known people. These remains may be the oldest on the earth, and may possibly have been erected by the earliest of men, in memory of the first parent as nearly as might be to the spot consecrated by his creation. We know but little of that region, and ought to know more. Though lying northward of the plateau of Pamure, near Cashgar, it was certainly the highway of communication

between the Sinæ* and the old monarchies on the Euphrates and the Nile. The commerce of China and the kindred peoples of the farthest east streamed westward through that channel more than thirty centuries ago. †

^{*} The Hebrew of Gen. x. 17 (יְּדֶּה = Sini), points to China. 'The Arabs call China Sin: whence the Latin term Sinæ. The Persians and other Easterns name it Tchin.'—See Mirkhond, in his Genealogy of Gengizchan; Herbelot, Bib. c. 811: quoted by Sharon Turner. The land of Sinim, Isaiah xlix. 12, may be China.

[†] See Sir H. Smith's Var. Man, p. 402.

CHAPTER XVII.

THE RELATION OF THE FIRST MAN TO THE VARIETIES OF

WHEREVER the first man first dwelt, he himself was doubtless free from any peculiarity in form and feature which may be attributable to the influence of climate. Probably the extreme types of variety, in complexion at least, are also the extremes in climate and position: the Mongolian and the Negro for instance. Adam, if we may adopt that name for our primeval earth-formed man, could have had nothing extreme about him; but whatever we can best imagine to be the exact intermedium between extremes will best suit the conditions required in the constitution of the man necessarily exempted by his creation alike from defect and redundancy. Nothing that indicates the effect of external influences or disturbs the ideal of a perfect man, nothing that marks any of his descendants as derived from a corrupted source, could have existed in We cannot so divest ourselves of the first man. remembered impressions as to suppose Adam quite unlike any man we have seen, but we may be certain that nothing of excellence in outward bearing that has

excited our admiration of any man, would equal the personal excellence of him whom we now endeavour to see with the mind's eye. By taking the best qualities of form and feature of the highest style of men known to us, we probably arrive at the nearest approximation to a true portraiture of the father of mankind. forehead is rather broader than the best Arab or Hebrew, and more nearly approaching to that of the Phidian Jove in its development. The nose is slightly more prominent than the best Grecian model, and does not run quite in a straight line into the forehead. eye-brows are somewhat arched, and neither overshadowing the eyes nor raised above their orbits. eve-lids are full but delicate. The eyes are dark grey, large Saxon. The hair is deep auburn. The complexion Caucasian, fair and ruddy, like that of the mountain-shepherd king David; and the whole face with open, ingenuous, commanding, affectionate, fearless, and truthful expression. The lips and chin moderate; not so covered as to conceal their power to express emotion, but full of pliable firmness and gentle manly dignity. The contour of the face is neither round nor oval, short nor long, broad nor narrow-there is nothing there to present a character of its own; every feature blends so perfectly into the harmony of the whole face, that we can only say, as with the poet, it breathes the music of a mind face to face with Heaven, and is perfectly human because it is so Divine. chest is deep and ample, but not large. The torso, or trunk, is like that of the cast taken from a living

Negro now in the College of Surgeons, which Sir Joshua Reynolds pronounced nearest perfection. The gait is noble, the step firm, the stature and bearing better than the best of England's aristocracy, which is the handsomest in the world. Perhaps an idealised Shake-speare, with brain and heart in sympathy with all nature, and with a pure, full development of all bodily powers and proportions, would best fulfil a reasonable notion of the first and foremost of men—a man who could think, and, thinking, work, and by his thoughts make all his work a worship.

Remembering all the prominent facts of ethnology, does any reason present itself against the possibility of every variety of man having descended from such a man as is here described? If there be none in physiology, there is none in fact. If there be a climate on this self-balanced world of ours which, above all others, is conducive to the highest development of human power combined with the most perfect personal beauty, most conducive to the fullest manifestation of the human mind in the human body, there must be other climes where the circumstances are less favourable to the preservation of man's comeliness and fair proportions, and where both the mental and physical nature would be necessarily liable to the greatest variation and curtailment possible from mere climatic influences. And, in fact, it is found that the further man departs from the range of temperature in which he can best exercise his mental and bodily endowments, the further be departs from the highest type of man.

The torrid and the frigid zones are not the happiest habitats of man. There, his nature fails to preserve its best qualities, since the energy of life and soul within him must be exerted in a struggle against forces directly and constantly inimical to health of mind and body. They are endured only in consequence of some modification of the physique produced by way of accommodation to the causes which induce that modification by gradual exposure to their influence. Accommodation implies departure and defect; and the change in body which is an accommodation to inimical forces is of necessity so far a departure from the standard human constitution, which can be maintained in its perfection only where the conditions are most favourable. But, while duly estimating the effects of climate, we should also bear in mind the deteriorating influence of the comparative isolation from commerce and intelligence which results to those inhabiting Central Africa or the Arctic regions. And, moreover, it should be remembered that the farther the families of mankind spread out and diverge from the original centre of civilisation, the farther are they removed, not only from the influence of that civilisation, but also from the position most favourable to the exercise of the intellect and the cultivation of those virtuous activities which best develope and preserve the corresponding graces of the outward form. Doubtless, there is a beauty of holiness which no clime can mar. Right thinking, producing right acting, will modify even the outer man to somewhat of the image of the

inner man; and our missionaries tell us that savage men, women, and children really become more beautiful when imbued with Christian love. We can well believe them, for we see the same thing at home, when degraded men become imbued with the regenerating Spirit of Truth and Love. 'Wonderful it is to see how the Ideal or Soul, place it in what ugliest Body you may, will irradiate said Body with its own nobleness; will gradually, incessantly, mould, modify, new-form or reform said ugliest Body, and make it at last beautiful and to a certain extent divine.'* In proof of this, we may refer to Mr. Pritchard's paper, on 'The effects of civilisation and education in elevating personal appearance,' in the Anthropological Review, July, 1865.

In proportion as men have departed or been driven, by war or their own wandering propensities, from the Asiatic centre where the one God was originally worshipped, as we learn from the oldest histories we possess, the earliest Vedas and the Bible, so, in proportion, have men left and lost the true centre and source of civilisation and all excellence. While, then, we consider the full value of the fact that the region most congenial to the body is, ceeteris paribus, the best calculated to confer vigour on the mind, we must also remember that, with all outward and material advantages, man unavoidably becomes depraved in mind and body unless influenced by those moral principles which are derived



^{*} Carlyle's Past and Present, p. 255.

only from the knowledge of man's true relation to his Maker and his fellow-beings. Even among the most civilised nations, physical degradation is constantly appearing as a consequence of moral dereliction. Of course mere religiousness is not the salt, the preservative, of society; but true piety is intelligent and reasonable: it sees what is to be done and does it- by work it preserves the power of working. There is proper muscularity in true morality and religion, for the man who knows that the Creator of all things indited the ten commandments also knows that the laws of nature are likewise God's, so that he does not expect to be safe and sound without observing and obeying them. The positive ignorance of the laws of nature, as regards man's bodily life in relation to outward influences, is astounding, especially among Europeans, who yet have public teachers of physiology and hygiene. It is mainly owing to glaring breaches of those laws that so much life is sacrificed in hot climates, as we find on the testimony of Hutchinson in his work on Western Africa, which accords with the experience of many others who have resided long in the torrid zone.

It is true that a cannibal in New Zealand or Figi may be in excellent training, by the enjoyment of his muscularity in the mere use of his limbs in the fresh air; but he is physically degraded still; he is not in the normal state of man, for man's brain was made to be used in thinking as well as in energising the muscles, and that savage cannot think to any good purpose, because his forefathers have entailed a degraded brain on him, while they left him an inheritance of foolish and therefore evil customs. A man is not the less degraded because he has a big and powerful body. There is something wanting in its quality for good uses, if derived from progenitors addicted to idleness and vice. In short, wherever the religious sentiments, the social affections, and the grand motive truths of reason, those relating to conscience and duty are not understood or not felt, because not enforced from childhood; there, whatever degree of civilisation may exist verges upon barbarism and savageness, for there the laws of nature, which are those of God, are continually disregarded.

The history of our own nation will illustrate the argument. Takethe Saxons. They brought the morals of a fierce religion with them from the East, but they worshipped powers supposed to inspire courage, and demanding a this-for-that kind of righteousness amongst themselves, with the right of might over others to any extent. They were noble robbers and murderous marauders, with many family virtues and clannish excellences. Their civilisation was rough, but strong in the strength of inherited and traditional laws that held them together as one people, with a grand respect for woman, and for chastity and clannish justice. So far as they retained any civilising power, they retained the principles of law and religion which they brought with them from their Oriental source. But the first traditions were wearing out from among them as among all

nations but perhaps the few Hebrews who held by the faith of their fathers and the worship of the one God. So their early civilisation was fast disappearing, when they were overtaken by a modified Christianity coming by another route—also from the East—and so by degrees, through the knowledge of God and the knowledge of His works and ways, a knowledge reimparted, not of spontaneous growth, we, their children, deem our civilisation a pattern for the world, and invite all the wise ones of the other nations to meet our own in congress to discuss the principles and practices most conducive to the advancement of social science. If Archbishop Whately has not shown, it certainly may be shown that the New Testament is the true civiliser.

Experience all the world over proves that high and holy ideas do not spring up indigenously in the uncultivated soil of ignorance, and that human beings left to grow mature under the influence of their bodily wants and mental instincts never spontaneously become superior in habits to those who produced them. lising influences are derived, but not inherent. Men do not learn from nature to think aright: they must be taught. Natural affection binds families together, but not nations. Who would expect civilisation to grow up spontaneously amongst the natives of Terra del Fuego, for instance? Experience does not draw them together to consider what laws shall be enacted to govern them Chiefs might arise among them who, by their natural endowments, might exercise authority, but that would lead rather to exterminating war than to civilisa-

tion. This was the result, more or less, in all the Polynesia. Not one of the islands had in it anything approaching to civilised institutions when first discovered by Europeans. Ages had probably passed over them and left them more savage than at first. And yet surely there, if anywhere, man had opportunity of social improvement if, according to the received theory of human progress, man inherently possessed the power of elevating himself without extraneous instruction. All the facts before us go to prove that civilisation may be lost but never recovered without a restoration of intelligence. Now, as civilisation, as far as we know it, has in principles spread from a centre in the East where records and traditions of earlier civilisation have always · existed; and as civilisation has never been found where it has not been conveyed from parent to child and from general society to the rising generation, we are obliged to conclude that a knowledge of true religion—the source of all right reason and real civilisation—was among the essential endowments of the earliest of mankind.* Therefore, it follows that departure from the centre first occupied by mankind

^{*} At the meeting of the British Association, held at Birmingham 1865, Professor Rawlinson protested against the assumption, that human beings were originally in that poor and destitute condition that they eat one another, or that they all arose from a state of barbarism. 'He held the very opposite opinion, that they were created in a state of considerable civilisation, and that most of the races had declined; and that, while many races had declined into absolute barbarism, some races had never declined. The Egyptians, Babylonians, and Jews had never declined.'—Quoted from the Anthropological Review, Oct. 1865, p. 363.

involved not only departure from the position most congenial to the best estate of man, but also from the centre of every kind of intelligence derived from the first families who best knew what must have been imparted to their first patriarch by Divine teaching concerning duty, religion, and the nature of things. Some knowledge of this kind must have been distributed, either by tradition or writing, amongst the families radiating away from that centre. they now stand in all we know of the races of mankind, confirm the truth of this observation, for tradition becomes wild and superstitious amongst them, though always pointing to wisdom lost, in proportion to their distance, separation, and detachment from what we must suppose to be the parent stock, that is, the most perfectly endowed and best-informed race of men, because retaining most of early knowledge concerning the attributes of God and the dignity of man as God's highest work.

Civilisation relates to the amenities rather than the arts of life, to the social compacts in respect to the government of communities, and to general understanding as to the domestic relationships, the sanctity of marriage, the honour due to parents, the respect of man to man, the inviolable rights of property and heirship, with the acknowledgment of responsibility in the employment of labour and the propriety of due provision for dependents, all implying commerce. In short, law, courtesy, and duty form the basis of civilisation, and where these are dominant, society is of

necessity refined as respects the intercourse of those who constitute its parts. This is exemplified as fully in the patriarchal state-for instance, in the life of Abraham—as in the case of large communities under the headship of royal and priestly authority. There may be no refinement of the arts in either case, but the existence of true social government will of course cause the development of the conveniences of life and promote the interchange of commerce on the principles of Doubtless every degree of civilisation is founded on laws and precepts better than the civilisation itself, for even the most instructed man rarely acts up to his consciousness of what is right. laws, proverbs, and precepts which prevail to the production of a civil state of society hold their influence on that state, because they come into it with an authority derived, either from tradition or record, of the duty man owes to God, and thence to his fellowman as belonging to God equally with himself. The old monarchies grew into greatness and consistency under laws directly attributed to Divine authority, as conveyed to them by their ancestral founders-in fact. from the patriarchs of the world-and they fell into barbarism and were broken into lawlessness, when the knowledge and authority of their first foundation ceased practically to influence their rulers. Then they began to conquer and enslave other peoples instead of extending to them the benefit of better institutions or higher knowledge. When thus the righteousness which alone exalts a nation ceases to reign over its rulers, it scarcely needs the voice of prophecy to declare the burden of the woe that is to follow.

The Pelasgic and Hellenic races retained somewhat of their Japhetic traditions; and we see from Hesiod and Homer that if Greek civilisation attained a high culture, it derived a Semitic impulse from the arts and traditions of Sidonia, Assyria, Media and Persia; while the Danaite leaders at the siege of Troy were most probably Hebrew colonists of the tribe of Dan.* Even the Hebrew slaves, who were not few, must have conveyed sublime ideas of law from heaven to the isles of Greece; and the Hamite element from Egypt infused into Grecian literature and religion a dim. grandeur which Herodotus is proud to acknowledge. Hence we see that the history of Greece affords no evidence that her high cultivation was due to a mere self-developing power, since, as the greatest and first of her historians shows us, the barbarism incident to the isolated and independent position and struggles of her earliest inhabitants, was subdued only by the importation of intelligence from the centres of antecedent civilisation. If, indeed, the Greek intellect has left us examples of peculiar excellence in art, language, and philosophy, we may best account for them by the wonderful admixture of all the older influences from the threefold sources of knowledge Japhetic, Hamite, and Semitic, which thus in a favourable soil reunited to produce a new development. Roman civilisation is traced to the same origin,

^{*} Joel iii. 6; also Latham's Ethnology of Europe, p. 137.

and all the empires are indebted to similar conditions, never growing into greatness from an inevitable law of progress, nor from an inherent capacity of development existing in any race of people, but from a traceable connection with minds enlightened by earlier traditions, or by direct communication with the Highest.

The power of Christianity to destroy old kingdoms and establish new and better, asserts itself in the eyes of the whole world. But what is this but to assert that the traditions handed down from primeval eras, the thoughts of old, prophesied in the past successive ages to be fulfilled in the successive future, linking the first with the last, possess a power to transform the spirit of man's mind and to shape the world to diviner purposes? The ideas of the patriarchs are the earliest on record, and are declared by the record itself to have a direct connection with the first in this world who ever had ideas, or distinct objects of thought and forethought. And it is these very ideas that are now building up new forms of civilisation upon the ruins of all the mouldering heathendoms from China to Peru. Everything else is effete and tending, not to progress, but barbarity, and the grovelling random impulses of savage life, which must either die out or be converted. The ideas in that marvellous old book, the growth of which even bishops cannot explain on natural principles, must be wonderfully like truth, if we may judge from their influence on the human mind, which it is to be presumed was made for truth. Not the least stupendous of the miracles belonging to the Bible, is its power both in doctrine and in story to interest and improve every variety of people who may be induced or enabled sufficiently to attend to what it teaches. This fact alone goes far to prove the unity of mankind, because it proves their unity in moral constitution and spiritual necessities. And, moreover, it seems to say that the Maker of humanity is in some essential sense, whatever we may say about the amount of human element, the author of the book that so addresses and affects the human heart and understanding. Viewing the matter as a mere phenomenon to be accounted for philosophically, we see no other satisfactory explanation. book distinctly answers the questions which all mankind have most at heart. No other does. The strong story of the genesis of earth and man is mighty in its majestic simplicity; it is the foundation on which the whole structure of the book is erected into completeness by many successive hands working on the same plan, and as if under the same spirit. In that basis there is nothing that need not be, and everything that is required; and in what is built upon it, presenting, as it does with life-like portraiture, the presumed history of God's direct dealings with man from the first through a connected series to the last man that heard the voice of God, it looks so consistent in plan and execution, that, to suppose it only human and not as truly Divine, is to invest it with wonders only the more inexplicable. the miracles it contains, we can find more reason than for the existence of the book itself, if it be not the work of God. It is like a temple, on every part of which the impress of the present and presiding Deity is visible; it is like this temple not made without hands, this earth, with all its awful garniture of life, beauty, and sublimity, crowded with mysterious small things and little interests, and yet overwhelming in its magnificence; plain in its many meanings to those who can read purposes in appearances, and yet so incomprehensible that the best informed can only pray for more intelligence as they grow in knowledge. Here the very elements ordered to maintain life, health, joy, become enemies to them all. Atoms endowed with power to propagate death float in our life-breath ready to destroy Earthquake, pestilence, tempest, and war, are ministers of the same Power that moulds the mother's heart, and says, Love one another. He that would walk rightly finds a spring of wrong within him and a foe for ever in his way. Why and whence this contrariety and conflict? Why does the invisible behind the visible mould dead matter into the living body of man only to die, while man thinks of immortality and life eternal? What a puzzle to philosophy is this orb of light and darkness, rolling in immensity with good conformed with evil on its surface! Where is the inspiration that can interpret the enigma without the Bible?

Who can explain why the Bible as a whole is accepted as divine by the highest intellects of Europe as well as by the lowest, that think of God with man? True, it has made the high intellect that most admires it. The lofty civilisation that has produced such men as Newton

and Bacon, not to mention equal minds now working out among us the problems of science and philosophy. is a civilisation due mainly to the Bible. But the book -and here is the telling fact for our philosophy-the book civilises everybody who believes it. The outside branches of mankind, the outcasts and the vagabonds, if recoverable at all, settle into order under its influence, with purer thoughts and better manners than the ancient Grecians ever realised. And he must be mentally degraded and far embrutalised who cannot be brought to feel the force of its human details and the divinity of its doctrines. Whatever the conventional tastes of men az to outside beauty, whether agreeing with those of Esquimaux, Negroes, or Englishmen, every mind awakened by the statements of that world-wide book becomes conscious that there is but one moral beauty-God-likeness; and he is the best man who possesses most of it, whether his skin be white or black. The Gospel makes that man most humane who best obeys its teaching, for its whole doctrine embodies the fact that justice is one with love.

That the Bible, when rightly taught, has the same civilising effect upon all races of men is, then, as we view the subject in its moral aspects, evidence in favour of the unity of mankind. But as this view of the subject admits of the most entire and direct denial by those who deny the value and admit not the authority of that book, it might be well to take a cursory review of the physiological and other physical reasons for believing it possible that every race of men may have been derived

from such a man as described in the preceding pages. But as such a review would too much interrupt the argument attempted in this part of the general subject, it may suffice in this place to quote the words of Professor Wagner, who has, from his position as a teacher of comparative anatomy for many years, had the fullest opportunity, as well as disposition and ability, to investigate the question as to the unity of mankind. In a lecture on Anthropology delivered at the first meeting of the thirty-first assembly of German naturalists and physicians, at Gottingen (Sept. 1854), he says: 'If you ask me, on my scientific conscience, how I would formulate the final results of my investigations on this subject, I should do so in the following manner:-All races of mankind can (like the races of many domestic animals) be reduced to one original existing, but only to an ideal type, to which the Indo-European type approaches nearest.' To this conclusion, Waitz, to whom we owe the most elaborate cumulation of facts in Anthropology ever collected, has also arrived.*

^{*} See Waitz's Anthropology of Primitive Peoples.

CHAPTER XVIII.

HUMAN FREEDOM.

In descanting on the claims of human brotherhood, we have not wandered so far as it might seem from the divine idea of man as we suppose him when first introduced to this wondrous world. A perfect man, dignified with personal beauty and endowed with all the faculties and affections that might render him worthy of admiration and of love, is a being which genius cannot fully bring before the eye of the mind. The poetry of language, of chiselled marble, or of pictured light fails, unless the words, the sculpture, or the picture, over all that else is noble, gives us in that Presence a face radiant with the conscious love of freedom. especial personality of the first man must have been imbued with the sentiments of free will most perfectly, for that is the most essential of all human prerogatives. The self-formative faculty of the soul, by which each man becomes improvable in knowledge and virtue, in a manner peculiarly his own, requires a consciousness of freedom in will and action, so far as that freedom interferes not with the law of his own well-being and that of his fellow-man. Each man is an original, so

far as he is free to choose for himself how he will exercise his instinct for instruction: he cannot call any man the master of his faculties. In accommodation to this implanted feeling, every thinking man finds an experience and an advancement in a path along which he is conducted by God alone. Feeling this, no man with enlightened reason and conscience can be at heart 'He is the freeman whom the truth makes a slave. free, and all are slaves besides.' Therefore the first man was free to learn any truth he could, in obedience to necessary law, for necessary law is necessary only because it is good, and cannot be broken without evil. Even now the sun shines equally on the evil and the good, to make the evil good and the good better. That was the meaning of all fostering influences, when man knew nothing of religious and civil despotism; and they who would rule man without enlightening him have the Spirit of Darkness as their ruler. Unnatural restraints are lawless forces that may produce deformities and monstrous developments. There is no authority but in love-free and freedom-giving love. Any attempts to compel men to think alike till equally intimate experimentally with the same truths, would be like making a Dutch garden, where trees and shrubs are trimmed into quaint shapes, pleasant only to minds so distorted as to find no loveliness in the flowers that grow, bloom, and blossom under the Spirit that first formed them. Created uniformity is that of life and freedom, where every kind of being is developed into a form of beauty belonging to the nature of its kind.

And so oaks resemble oaks, though no two oaks spread out their arms in exact imitation of each other. souls, under influences fit to promote the growth of souls, expand not into the precise likeness of each other. Nothing but hard trimming and stiff training will reduce souls into quidnuncs and quincunxes. stupid to carve a yew tree into the portentous shape of a peacock, a tree only figuratively speaking. stupider to cultivate minds to a uniform pattern, like melons grown in bottles. Charles V. of Scotland tried his hand at this kind of carving and curbing. He determined to make all his subjects conform to his own creed. What was the consequence? He committed an outrage, and learnt a lesson which taught him to reason better on the nature of souls. Afterwards, having two clocks that he desired in vain to keep the same time, he exclaimed, 'What a fool I was to fancy I could make men think alike when I cannot even get two clocks to go together!' The greatest fools are those who would cast all souls into their own mould. Souls are more perverse than clockwork, because they are powers, not machines. Every mind has its own master motive power, a distinct spring of action, necessarily producing a difference in working. As, indeed, under the same electric influence, many clocks may now be made to keep the same time, so a community of minds may and do co-operate to the same ends under the same Spirit. But fellow-feeling under a common interest no more makes men work like similar machines than it causes their hearts to pulsate at the same rate. As souls are often dwarfed at school, like plants growing too thickly to be duly supplied with individual nurture, so they often, when transplanted into larger fields, betray their scantiness of root by their little unsuccessful attempts to become larger. A flock may be fattened for the market on the same pasture; but minds have such various powers of appropriating what is needed for their individual development, and demand such variety of management, that, without some indulgence to their instincts for different kinds of knowledge and employment, the life of the heart gets feeble, the brain fails, and the man becomes a distorted, stunted creature in mind and morals. A man obliged to conform can only be either a slave or a hypocrite. Why is this? For want of freedom. Unless the will, under instruction, have liberty to work in its own way, the very basis of moral relations is disturbed. A mind that grows under force, especially the force of fear, is tormented, and must grow awry in its morals, because the true source of enjoyment and health is wanting-love and liberty, without which man is indeed a slave. where love is wanting, the man becomes a brute, to be restrained only by force.

If, then, the only way of improving man's heart and intellect be to promote delight by exciting the will, through love, to seek intelligence, the first man must have felt nothing but freedom. Every law, natural or supernatural, under which his will was brought into action coincided with the working of that will, and he needed only to act to be happy. The will and power

were one, and all without and all within were in accordance with his well-being, because the Maker of man made him not a slave but a co-operator—that is, capacitated to carry out the Divine purpose under natural law, with work ready to his hand and a soul to do it, as the joy of his life. With every increment of knowledge, he knew more of his own value, because he knew more of God. True knowledge is always so much revelation of the Divinity, and man's true dignity is the conscious reception of that knowledge, which, while exalting the soul's felt worth, as it must for ever do, excludes pride by exciting higher adoration of the absolutely Good.

The necessity of working out the purposes of the mind according to laws fixed in the nature of things does not interfere with the true freedom of the rational will, because the mind sees the necessity, and therefore the wisdom, of the laws themselves, and of course chooses to obey them, because wishing to succeed. The will, so to say, moves in the line of natural forces, and so makes them subservient to the end desired. delight and duty become one. A man, for instance, labours at some handicraft to support his family, and he is happy in his labour because he loves his familyhe voluntarily adopts the toil while obeying the law of Providence which requires it. He is free, while still constrained by his love and sense of duty. The consent to such a force is, in fact, a mode of walking with God which a man of sound heart and mind would not forego, since it is the very way indicated as the only safe and happy one.

Doubtless it would be pleasant and profitable leisurely to meditate on the necessary connection of man's mental nature with the outward world, whence man was to derive his ideas and delights, in sympathy with other natures. We might endeavour to conceive how a perfect mind would elaborate in thought a theory of the universe, with a divine spirit of philosophy breathing new religious feeling with every new apprehension of truth. But we have no reason to conclude that any created intellect is equal to the discovery of truth without instruction. It is true that science, in the present day, is busy in acquiring a knowledge of the properties of things, and in applying them to practical and useful purposes, thus far, as it were, restoring man's dominion over nature. But science, at her best, is very ignorant of anything beyond appearances, and can explain nothing of the real causes of phenomena. Now, truth means something besides appearances; and if science and philosophy know and assert anything beyond-anything of the reason why and how-it is not from insight, but because something of intelligence has been superadded, derived not from inference but from revelation - such as the unity of the Power which called the universe into existence and upholds it. Science talks of forces inherent in substances, and when asked to account for them, can only refer to Will residing somewhere. That means a Personal Originator, a sole Being, without beginning, selfcontained and everlasting, whose existence is not a discovery of science but a revelation made to meet the

demands of reason, and yet, perhaps, never found by unassisted intellect.

There is a pleasure in pursuing knowledge for its own sake, without seeing how the knowledge may apply to useful purposes. It is a gratification to curiosity, if nothing more. Thus, he who took delight in cutting a cone into all possible sections might not see the relation of those sections to all geometry. It was enough for him, perhaps, to discover that the five figures or sections -the triangle, the circle, the ellipse, the parabola, and the hyperbola-were in the cone, without discovering the uses to which mathematicians apply them, and how astronomy shows the three last figures ruling in the movements of the celestial mechanism. But the highest enjoyment of reason is to discover the mind and meaning in all possibilities, and to trace the application of fixed principles to the working of the universe. How poor the pride of Laplace when he excluded the idea of God from his hypothesis! Those who study to discern the mode of divine operation doubtless find a pleasure worthy of their labour. When Euclid reasoned on the properties and relations of linear forms he must have felt a high pleasure in the consciousness that all mathematical reasoning must conform to his demonstrations. But unless he went further than to love this knowledge for its own sake, his pleasure was but that of gratified intellectual pride. To know truth alone is a barren If the knowledge of truth of any kind bring not the mind to the Author of the truth, it is nothing worth. Truth, whether natural or spiritual, avails to elevate the man only as it proves to him the relationship of his own mind to the Person who made the human mind capable of perceiving His mode of operation, and of working with Him by obeying Him.

Now, a lone man, sole heritor of earth, with no instructor, would have been a poor orphan indeed, and little fitted to make discoveries of the meaning of things and the purpose of his own existence. But the first man was the son and heir of God, and we are constrained to believe that the Father personally instructed him in all that was necessary to the satisfaction and happiness of his heart and reason.

The eye in smiles may wander round, Caught by earth's shadows as they fleet; But for the soul no help is found, Save him who made it, meet.

KEBLR.

CHAPTER XIX.

MORAL LAW.

Among the earliest necessities of man as a moral agent, would be the knowledge of the nature of moral law. Any law known to be from God is a moral law, because it demands obedience from reverence to His unerring authority as man's Maker. There must have been, therefore, in some early period of man's history some arbitrary law imposed on him, demanding entire confidence but yet involving a penalty in its breach. was necessary for the exercise of man's moral faculties under sense of responsibility, as a free agent in relation to a positive and unquestionable authority. Beyond that purpose of exercising free will in respect to God, we need not now enquire into its nature. Of course that law meant self-control, something desirable but not to be done, yet without the sacrifice of enjoyment, only with the exercise of a perfect faith in the wisdom and love that enjoined its observance. Before any such injunction could have had value as a teaching test, the moral influences pertaining to the love of approbation, love of knowledge, love of power, love of self, and that higher reflex of self-love-affection for another as the

complement of a man's own being—must necessarily have been experienced. As humanity is not complete but in the union as in one flesh of man and woman, so the test by which the nature of parental authority as requiring perfect obedience as from a child, not knowing why, but in reliance on proved love, must have been imposed on the united nature that was to become parental.

The life-union of man and woman in a common interest, implies the previous acquirement of language as the vehicle of thought and feeling. The imposition of a law that we must suppose orally expressed, also implies a language as its vehicle. This possession of language by man will demand our consideration as we proceed, but as we have now the first arbitrary moral law and its effects before us, it will be well first to reflect on its operation.

The possibility of obeying or disobeying the first command of God must determine the course of human destiny. The divergence in perpetuity between right and wrong is seen in any small act of will as much as in all history; the divergence begins at a point anywhere, but where does it end? It is the point at which the self-will turns away on its own centre under a force that operates for ever, unless some other force meet and overpower it. A direction taken at variance with the Divine will runs on in the same line as long as thought exists, and can know no turning unless Divine interference produce repentance and so recovery.

In thinking of law and faith, we are thinking of that which distinguishes man from brutes, that is reason and

all that it includes. Of course those philosophers who find no essential difference between the minds of the lower creatures and their own, deny that reason, implying apprehension of moral law, is a characteristic of man; they contend that the difference is one not of kind but degree, a conclusion perfectly unavoidable if man be but a more highly developed brute. conclusion that involves the necessity of regarding brutes and all creeping things as sinners, or tending to become so, in however slight a degree, certainly disturbs our prejudices if it does not wound our pride. ever, if that be a truth, we are only the more to be pitied the more we feel disinclined to believe that criminality. enthusiasm, virtue, vice, conscientiousness, morality, and religion, are to be imputed to brutes, as some say. Moral and immoral dogs, cats, and horses! Fido, poor fellow, is afflicted in his conscience and ashamed of his misdeeds! How we sympathise with Fido! he 'appreciates the majesty of my ideas' of right and wrong-a 'The rapacious tribes are evidently in a low moral condition; and, alas! they ever will remain so. as the necessity of their organisation and of the limited extent to which it is possible for man to influence them' with moral consideration.*

The writer quoted asks—'Who can draw the line of distinction between the love of a bird for its young and

^{· *} See The Moral Faculties of Brutes, by Shirley Hibberd, in the Intellectual Observer, October 1863.

the love of a human mother?"* Certainly the human mother's love is only a little more intelligent, but not a whit superior in power, unless with the life laid upon her bosom she recognise the Love that made and watches over herself—unless she feel that her offspring partakes of immortality, and belongs to God for ever. The bird's love is just as beautiful in its strength as hers, perhaps, but there is a vast amount of difference between a praying mother's love and the bird's. But terrible is the difference when a human mother having in her wretchedness neglected or forsaken her child, afterwards awakes in conscience to the feeling of that sin as against her nature and her God.

Animals, or at least dogs, it appears from the authority quoted, have religious sentiments appealing to their moral nature: 'The dog worships man, but it is man's privilege to worship his Maker.' The dog's veneration, however, cannot be very discriminating, for it is as worshipful of Bill Sikes as it would be of William Wilberforce. Hereditary original sin belongs also to brutes, according to the same authority: 'Some men are born criminals, and so are some dogs and horses.'† Poor creatures! Who can convert them?

'The range of brute faculties is by so much narrower than the range of human faculties as this or that order is farther removed from man by inferiority of organisation, but the mind is of the same sort in both cases;

* Ibid.

+ Ibid.

there is but one mind, and of that animals share a sufficient part for all the exigencies of their life and something more. Now it is worth asking if it is possible to separate thought from moral feeling? it is possible for a creature to think at all, without also desiring to think truly and do well? If the animal races share with man in the power of ratiocination, do they not thereby become responsible agents, both before God and in the face of nature?" question should be added: Is there not deplorable confusion in all this? We may reasonably answer all these questions in the affirmative and yet negative their demand, for we should say thought does involve moral feeling, and therefore brutes have no thought. To think at all is also to desire to think truly and do well; and, therefore, as animals do not desire to think truly, they truly do not think at all. Where there is the power of ratiocination there is also responsibility before God, and, therefore, as animals are not responsible before God, they have not the power of ratiocination. What is meant by an agent 'responsible in the face of nature' is another question, not to be answered till understood.

To assert that there is a community of reason and morality between man and animals is to assert somewhat too much, for as animals by nature accomplish what man's reason cannot, and as they are incapable of man's maliciousness, it would follow that animals are

* Ibid.

not only more moral than man, but also more rational. Let us suppose that mammalian animals and birds exercise their sagacity through brains organised more or less like man's: say the beaver builds a dam and a set of chambers for its family because its brains resemble those of the engineer and the architect; say the tailor bird sews leaves together because it happens to have a tailor's form of cerebrum, and so in all the tens of thousands of birds, each evincing its own peculiar style of constructiveness. But then, how do the wasp, the bee, the ant, and every other insect in their immense variety, each in its own manner, construct its own form of cell, and so forth, precisely appropriate to its wants, with even more exquisite skill than any shown by birds or beavers, and yet without a brain? Surely there must be more than one sort of mind. remains to be proved that animals do think, reason, truly love, moralise, and worship. The confusion on the subject, perhaps, arises from forgetting mentally to define the terms thought, reason, love, morality, religion. We may not be quite adequate to that task, but we shall become conscious by the effort to understand ourselves in the use of these words that we mean by each of them something which man alone can require, or be capable of experiencing. Our consciousness convinces us that they are really human states of mind necessary to us in relation to each other and to our Maker, and without which our humanity itself would be incomplete. We experience diversities of feeling and emotion altogether due to abstract

conceptions. We are tender to the weak, kind to the kindly, interested in our own, delighted with the beautiful, charmed with lovely innocence, but we really love only those whom we believe good in will and beautiful at heart, and not those who are fair merely to look upon.

But such states of mind are not necessary to animals. They need no abstract ideas of goodness and badness; no notions of benevolence as the only ground of true love; no motive for measuring impulse, likings, lovings, and attachments; no thought and reason to accomplish their work and to decide their mode of action; no religious views to satisfy their souls as to the mystery, origin, and end of being; no faith in a Creator to fill them with the feeling of a life that grows into an eternal future. Man may be the epitome of the whole world, and have within his nature some element of every kind of life, and so he may, in a manner, be connected with all animated existence in the organisation of his lower faculties; that may be, but whatever may be, it is certain that man cannot seek fellowship with brutes on the footing of community of interests or similarity of sentiments. Though sometimes playmates, we are never school-fellows. They think not in order to do their work, because inspired with instincts superior to science; but all our excellence is nothing without correct instruction and a will to employ it. are taught to think, to reason, to love, to do our duty. socially and religiously, and without teaching we, in all respects, fail to obtain that mental development which distinguishes man as a civilised being and brings his

better faculties, mental and moral, into use. Education improves and completes a man, but spoils a brute, except as the slave of man.

Animals are subject to nature, man uses nature or abuses. Animals are natural, man is, in many respects, supernatural. As a free agent, exercising choice, he shows himself above nature by perverting nature. The spiritual force of his will is often engaged in directing even the laws and conditions of nature to wrong ends. Within certain limits, it is in his power to oppose the purpose of the Almighty by employing the elements subservient to life and joy for the production of death He can turn order into confusion. and woe. nature is adjusted in such a manner as to aid man in every effort to improve his condition, promote comfort and increase happiness, and yet he is constantly manifesting his skill in the construction of engines having no purpose but to scatter destruction and assert his He takes advantage of natural forces ordained to the preservation of health, and applies them against his own well-being and that of his brother man. proves himself supernatural by furnishing himself with means of gratification beyond his wants, and he combines what nature offers to his hand to form instruments to overpower nature. By abusing nature, he produces disturbances in his own nature which involve him in ever-extending evil. He can sin; that is, he can put himself in will and working out of keeping with the laws of God, physically, mentally, morally. He can disturb the ordinances of Heaven embodied in every substance, dead or alive, in this world. He can act against the constitution of his own soul and body. He can convert the very causes on which life and happiness depend into causes of pain, disease, destruction, death, because his will is above nature, and can interfere with the working of nature by the perversion of his own soul. He can disturb natural order, but cannot limit and control the disorder he produces, because the powers of nature operate as causes and effects on the principles of fixed laws which are beyond the dominion of man's will.

Man has conscience because he has free will, but conscience implies the knowledge of good and evil as positive things, known only by the imposition of moral law. Man, then, must have been instructed in duty before he could break a command, and thus learn experimentally the difference between good and evil as affecting his own conscience and condition. We cannot divest ourselves of our felt obligations to do what our conscience approves. As Lord Bacon expressively observes: 'The light of nature [God's teaching] not only shines upon the human mind through the medium of the rational faculty, but by an internal instinct, according to the law of conscience, which is a sparkle of the purity of man's first estate.' It is not in our power to dismiss from our minds any moral truth once received; it unavoidably pertains to our conscience, and that is never absent unless in insanity, which is always a confusion of our moral as well as our mental nature, because it disorders the perception of personal

relations. It is proper to free-will intelligently to seek truth and to hold it as a heritage of the soul, and man can never forego that possession willingly without becoming a slave at heart to corrupt desires. truth is to love God, and that is freedom of will. dungeon can confine, no torture subdue, no fire consume a will influenced by what it believes to be true, that is to say, a fact of God's making. But the will is above conscience, and defies even the voice that warns it of condign punishment. It is so strong in its freedom as basely to suppress itself, as Galileo's will seemed to yield submissive to a will known to insist on a falsehood. But still he had his will; he yielded for his own purposes, free still, and in silence he grew stronger to stamp curses on the oppression to which he ought never to have yielded but as a martyr, when he would have been free in truth, moral as well as intellectual. It is not possible to separate one from the other in respect to man's spirit. We cannot imagine knowledge ever distinct in operation from the motive that actuates the intelligent will or rational mind. Instinct may and does act without either will or knowledge. Impulse, without thought, is a sufficient guide to every creature but man; and, therefore, man alone is capable of sinning, that is to say, of desiring and doing in opposition to what he knows to be right. The will of man, however, is at first necessarily excited by sensation, and would as necessarily be determined only by the agreeable or the disagreeable, the pleasant or the painful, if not influenced by the direct teaching of some mind

knowing his mind, and better informed concerning results than himself. True, he is taught by experience, that is, by his knowledge of other beings and things. In this sense man alone knows. But he knows nothing of his own nature or springs of action until revealed to himself by the awakening of his conscience, or by the revelation of a higher, holier will than his own. He, like every created thing, acts according to his nature only by being acted on. He evinces his individual characteristics under the conditions made for him. He can acquire no knowledge from nature by which to elevate his own desires. Until he knows there is a holy God-and that he cannot know but by the revelation of that Being-he can have no motive for the government of his natural affections, or for exercising self-denial for the sake of improving his own spiritual status. And

> . . . unless he can Erect himself above himself, how mean a thing is man.

The will of man is essentially the manifestation of his spiritual nature; and because he is endowed with reasoning faculties, or the power of inferring morally what it would be right to believe and to do under given conditions, he cannot, without mischievous mistake, separate his religious from his secular education. If he be not learning his moral relation to his Maker and his neighbour by the knowledge he acquires, he is not learning the truth. All that man can know of truth, that is, what God has done and said, serves only to

enlarge the sphere of his known relationships to God and other beings. Therefore man's sense of duty is bounded by the extent of his knowledge concerning God, and the means at his command of employing and applying that knowledge as occasion may demand for the good of society; and his happiness in the possession of truth is dependent on his willingness and ability to do and to be what truth requires. Thus, the moral and intellectual faculties of man operate together. To know the truth, and not to think and act in keeping with that knowledge, is not merely to do violence to his mental and moral constitution, but, so to say, to commit a moral and spiritual suicide by making the very elements of his reasonable existence, calculated in themselves to perpetuate his highest enjoyment, the means of irremediable misery. For a soul, once reduced to the state in which will is at variance with known truth and duty, is beyond recovery by any effort of his own mind. He cannot even desire that God should help him, he distrusts the Almighty; he can be restored only by a Power beyond himself, capable of changing the state of his will, either by direct operation upon his spirit or by the impartation of such knowledge as shall necessarily involve a rectification of the motive powers of his mind. When man perceives his position and relationships, he desires to know more of them; but knowledge is a terrible heritage if it be but as a light upon death and ruin, revealing the maze and mystery of evil without showing a way out of it. Man is greater than the evil within him or around, and when he knows, as he may, how suffering and death comport with boundless love, that love will be the fulfilment of his life and of his will.

That man is now in a state of mental perversion, is a fact as patent as any known to science; and it is a fact that neither science nor philosophy can explain without supposing some interference with the right working of the laws of human thought, will, and action. The contradiction existing in the mind of man, between the knowledge of what is right and the disposition to do what is wrong, remains a mystery which no theory will solve without recurrence to the authority which teaches the positive infection of man's nature by some malignant agency always working in it, and to be eradicated only by some benevolent agency stronger than the evil. To believe in the ultimate revelation of God to man as reconciling all things to Himself, is to believe that the Almighty is necessarily Goodness itself, and that therefore evil cannot be a final cause of anything, but that the end and purpose of all power is good.

There shall never be one lost good! What was shall live as before;
The evil is null, is nought, is silence implying sound;
What was good shall be good, with, for evil, so much good more;
On the earth the broken arcs; in the heaven, a perfect round.

ROBERT BROWNING.

Ignorance, unguided either by intuition or by instinct, is unavoidably prone to error both in judgment and in action. But no one justly blames a child, that knows no better, for mistaking a flame for a bright plaything

and burning its fingers in trying to grasp it. The suffering innocent is only an object of pity, and the blame is thrown on the neglect or indifference of the person whose duty it was to prevent such an occurrence. There is no sin where there is no knowledge of moral danger from indulging inclination and desire. Man, then, if intended to be a creature capable of distinguishing right from wrong, good from evil, morally considered, could not have been left devoid of moral instruction in his first training. The completion of his natural endowment could not otherwise have been effected than by some positive injunction as to his duty in some given case, in which he might be tempted to act simply upon the impulse of natural inclination. A case is supposed in which his reason would perceive no evil, no sin, in obeying desire, except for a command prohibiting the indulgence; and the law could have had no validity to his conscience but in consequence of proceeding from One whose known wisdom and love entitled Him to express the prohibition, and to demand obedience on the ground of faith in His love who enjoined it. Therefore, before any such law could be reasonably given, the wisdom and love of the Creative Being must have been in some manner demonstrated to the full apprehension of man's mind. A will, of necessity as apt to go wrong as right unless influenced by intuition, instinct, or intelligence, could not sin, unless previously informed in one or other of those ways. do we see how man could become a sinner, conscious of wrong doing, wrong in will, had his conduct depended merely on the operation of an intuitive or an instinctive influence, seeing that neither instinct nor intuition could be regarded as appealing to his power of will to decide for himself whether he would or would not obey. Intuition and instinct rule the will, and if the will take a wrong turn while under their sole control, the error is due to the insufficiency of that unavoidable control under the circumstances. But man's will as a moral agent is good or bad only so far as it is ruled by intelligence, and has reason to rely upon the source of that intelligence. A man must understand and approve what is right before he can wilfully do what is wrong.

Man, then, because of the freedom and power of his will, needed divine instructions to the fullest extent concerning his own nature and position as well as the attributes and character of his Creator, before he could have sinned against God's law. The first man could not have sinned against moral law, so far as we understand moral law, as in relation to our natural affections or social relations. Supposing the first man to have had the companionship of woman in his innocency, he could not sin in respect to his natural relations to her, since his natural affections constituted the very nature of his innocence, and so of necessity placed him beyond temptation in that respect. The first law could not have related to his duty as a man with his companion, but to something in which both might be tried, and both fail in simple faith on God Himself. And in this sense still, whatever is not of faith is sin. A moral law is a Divine revelation—a word of God to man. The law imposed on man at first could only have respect to man's reason for trusting in God's own word. He must learn obedience on the reasonable condition of submitting implicity to the command of one known to be absolutely wise, holy, and benevolent as man's Creator. He must yield his will, power, mind, and soul in love, without any other discoverable reason why. He must obey because, through ignorance and the very capacity he possesses of acting as he chooses with the means at hand, he cannot be directed and kept right without obedience in faith. By the necessary limit of his faculties he is liable to sin and to all its deadly consequences. He can be safe only so far as he learns, believes, and loves truth, which means only God's He must be divinely told what he instruction. may do and what not do. Divine thoughts are all uttered in deeds, and if from the nature of man and his condition it was impossible for man to know the thoughts of his Maker towards him without a human manifestation and oral teaching, then that manifestation and that teaching were among the first facts of human experience.

If man, then, possessed an inherent capacity for the reception of moral law, that law was given. But this moral capacity of heart and intellect to receive and appreciate moral law implies the giving of that law with the authority of One by nature and right qualified and disposed to express His will to man, and so impose that will as law on man. The very idea of such a law,

moreover, necessitates the utterance of that law in words either written or spoken, and addressed to man who had previously been instructed as to the significance of the words conveying the permanent expression of that law, the law itself being an outward appeal to the inward sense possessed by man of the truth, justice, and benevolence of that law. A law implies, of course, its promulgation in an appropriate manner. Therefore, it is not enough to suppose that is to be called a law, or a Divine ordinance, which is merely inspired in man's spirit, or impressed by nature on the heart of man; the law must also be a thing existing as an expressed fact, and to be referred to as such by one person when addressing another.

A law forbidding a certain act, not in itself sinful, could have no operation from any natural conception of its fitness, it could find no inspiration in the conscience towards its fulfilment, it could be apprehended as a law only by its being spoken of and taught as a law binding human beings to its obedience because God had positively imposed it in His right to be implicitly obeyed as the Author of existence and blessing. the person who received it from another who received it from God would necessarily be as much bound to obey it as he who received it direct from its author, provided that other was in a condition to warrant its being conveyed with perfect correctness and with the authority of a truth. That the first law could not have been of any other nature than that of an arbitrary injunction having no relation to natural conscience in itself, is evident since there could have been no spirit striving against the flesh, no sense of good or evil, no temptation to vice, in persons perfectly innocent. Conscience pertains only to the sinner, and began to operate in producing fear and disseverance from God, only when the guilt of not having implicitly trusted Him and obeyed His absolute command had already entered. This sin is thus the parent of all other sin, and because of its existence conscience, that either accuses or excuses us in the sight of the Heart-searcher, becomes a necessary ingredient in human individuality and consciousness. The first law and the first sin were thus, of course, the origin of man's knowledge of good and evil in relation to his own spirit, and that knowledge as to man is also of necessity the beginning of death, since evil known to its full extent is death itself, not of course in the sense of extinction of being, but in that of separation, in thought, will, and feeling, from God, the Source of life and joy. And the full meaning of that separation can be known only when all the possibilities of man's existence in the world of spirits is known; and this involves the dissolution of the connection between soul and body as one of its conditions, without which the realities of evil beyond this life cannot be experienced. Are we, then, to conclude that the first sin involved eternal death and all the bitterness of everlasting evil as an actual experience? Yes; if there be no remedy for sin. No; if, as we believe, God Himself assumes the place of the sinner, and takes sin away, that the righteousness and love of Almightiness may be revealed to man as

thus immortalised, that is, by partaking of the Divine nature as given to man for an eternal portion not by creation but redemption.

Were there not physical death in a sinful, suffering world, it would be a hell unlimited in woe and wickedness. If waves could not drown, nor lightnings crash, nor disease destroy the body, the slaves of lust would laugh eternally at sin, with nought to fear unless the body itself lived on in torment with the demons of misdoing. But Death, the messenger of mercy to the woeworn, weary penitent weaned from the love of evil, faces the daring criminal, in his cruel selfishness, ever with a call to judgment that checks his mad career, saying, What shall thy soul win then?

Bring me the sailor, chuckling in his ship,
The babe whose cradle knows no mother's knee,
The adulterer in the riot of his kiss,
And say Zeus reigns and Death.
SIR E. BULWER LYTTON.

As it is conscience which proves that sin has come into the human world, innocence is conscienceless; and in that respect mere ignorance of God and His law is also darkly unconsciousness of the nature of moral evil. If, therefore, we find amongst some savage peoples a total absence of all moral consciousness we know that the habits of their lives have destroyed conscience and the law of the heart; and if among others we discover conscience in operation we know that they must have retained traditionally, or otherwise have acquired, some apprehension of their duty to each other as under law.

Some men reason on the assumption that the Maker of man never dictated any law for man's guidance and to teach the need of faith as the gift of God to those who seek to surmount temptation and escape from the miseries of sin. But God has not left the world without witness of His existence as a lawgiver. Every man feels that a law has been uttered somewhere which he has broken; and who will assert that man is not everywhere, if not insane, under the influence of a power that convinces him of sin? However he may word the law which he has broken, he owns, by his fears, that it is against the Supreme that he has sinned. Where is there a people without natural conscience active enough within the soul to enable them to distinguish between right and wrong, good and bad, in a moral sense? Dr. Colenso informs us, moreover, that 'the Zulus have seeds of religious truth planted in their minds by the Divine Hand, and that they recognise the existence of the double heart - the constant strife of the flesh and spirit.' *

This one thing, then, is the mark of thinking man—he sins, and is conscious of it. As Ovid says:

Video meliora proboque; Deteriora sequor.

That wonderful heathen, Plato, says: 'The nature of man is degenerated—it is torn to pieces by lusts. The prime evil is inborn in man.' † 'The harmony of the

† Gorgias.



^{*} Dr. Colenso On Missions, in the Journal of the Anthropological Society, July 1865, p. clxiii.

soul is destroyed.' He also says: 'God alone can restore it, and bring man the true cure, as of life from the dead.' †

The response to this expression of law in the conscience is the law orally and verbally expressed and written in the Ten Commandments, summed up by Christ as love to God, and to man as loved of God. Every man's real character, morally, and perhaps intellectually also, is in keeping with his habit of obeying or resisting the dictates of his conscience as enlightened both mediately and immediately, by oral law and by the sight of true love. It may be questioned, however, whether the natural conscience is ever properly and fully awakened to the knowledge of sin without being taught God's law as expressed in words; and it is certain that the conscience once awakened to the fact of the iniquity of sin, as committed against the law of love, finds no rest without the knowledge of Christ as the Saviour from sin and the giver of eternal life, by the importation of His own spirit. A man, in fact, knows sin only when he knows God's law; and as he must hear of that law before he feels sin, so he must hear of Christ's love before he can find a saviour from sin.

It is only as man knows God that he can love God, and God alone can reveal Himself; and only as man loves God can he own God Himself as an authority to govern man, for love alone is authority sufficient to command positive and entire obedience, resignation,

* Politics.

† Gorgias et Leg.



and submission of will. Knowledge itself is unsafe without love. Therefore, when man was first taught truth, he found it one with the utterance of love. Intuition could only be a ground of love and knowledge, and without a personal manifestation in a human manner, man could neither know God nor conceive His character as an object of love. This natural truth is the basis of Christianity, and yet Christianity is a system surpassing man's invention; for what man, untaught by Heaven, could dare to assert the union of the Divine and human natures in one person, who should conquer death by being subjected to that penalty, and that any man having faith in the fact was endowed with a right to call God Father? We accept the knowledge of His love as a positive truth without considering that He himself must have revealed that truth by words addressed to our reason, because He who is Love and Light to man is so in language as well as thought. The first man needed to be told of God's thoughts towards him as much as we do, and therefore we conclude that the voice of the Divine Logos was the first to be heard by man; and that without actual words and meanings being thus adapted and addressed to the soul and ear of man, he could neither have acquired language nor have learned anything concerning his spiritual relationship to his Maker. If this thought demands explanation, it will probably be found, if we endeavour to reason on the origin of human language.

CHAPTER XX.

THE ORIGIN OF LANGUAGE.

No being on earth but man needs language because no other requires teaching, but the very structure of his mind demands instruction in order to its complete development, and therefore he requires to be taught language. No other creature is capable of mental improvement; no other has a mind to improve. And no being incapable of perceiving the unuttered reason, the latent mental and moral capacity of man, could have informed the intellect or inspired the conscience of man. And as He who imparted the power to learn truth could alone impart the truth to be learnt, so He alone could devise the appropriate means of conveying thought from one mind to another by the ready channel of the ear in the utterance of articulate sounds. who made the mind of man thus to be awakened, could alone so accommodate that mind as to teach the first man to think while teaching him to speak. The same love that provides in the parent a teacher of words and thoughts to the child, was required to act in the same direct manner towards the first human being, who was truly the son of God. Is any degree of accommodation

to such a being as a newly-created man unbecoming in the Almighty? To teach man as only he could be taught —that is, just as a child is taught by a parent—were no condescension in the Omnipotent, but only consistency: for He it is who speaks in the heart of every loving parent. He cannot condescend in the vulgar sense, because He is the same in the least as in the greatest; there is no minimus in maximo to Him: atoms are as much His care as worlds; and if the first man could have no other teacher God taught him. Is not the spirit of man made on purpose to receive God's thoughts in words as those of love? And can love condescend? No, because it is love, and must accomplish whatever is needed to reveal itself; and what is that but the revelation of the Eternal Reason to the responsive created reason by all means which the condition of man may render necessary?

Language was as much required to meet the first man's necessities as a thinking and social being, as food for his bodily sustenance. Words and meanings are the food for the rational soul, and who could supply them to that soul at first but the soul's Creator? The gift of language is implied in man's possession of a capacity to receive it; but language is not a gift in the same sense as the capacity for language. A language is not made by one being to be bestowed at once upon another. The spirit, will, and intellect must be trained progressively, as if by lesson on lesson, to receive it. There must be sympathy between the giver and receiver, a correspondence between the teacher and the taught,

an active energy put forth towards the acquisition. Intuition and innate faculty for language could not originate language, they could only employ it when provided. That man's mind might obtain ideas concerning use and beauty, order, plan, purpose, the feeling of the good as one with the true, a personal presence and a voice were required to educate it to the full appreciation of its own powers. The teacher of the first man possessed the power of inspiring the ideas or thoughts he desired to convey while in the act of uttering their vocal signs, or they would have fallen on the ear without significance; and as surely as the Maker of the mind is the author of thoughts, He also fitted thoughts with words and fixed them in the memory of our great forefather as uttered powers.

The only obstacle to the belief of the statement informing us that God himself taught man in a human manner, is the difficulty of conceiving the fact. The same difficulty is experienced in receiving any truth with which we are not familiar. It is, however, as easy to conceive the Divinity directly operating in a human manner towards a human being, as to conceive the creation of that being. All truths and facts of existence in respect to their origination are equally removed from the sphere of our conception, and we receive them as facts and truths, not because we can understand how they became such, but only because we can no otherwise account for their existence than as the results of Divine operation. That man was from the first taught to speak is more consonant with our apprehension of the

nature and necessity of the occasion than any of the theories propounded by those who reject the narrative on which we ground our belief that man was instructed directly by his Maker.

There are three theories on the subject, but all rather more difficult to conceive as truth than the statement which asserts the presence and voice of God, evinced in a human manner, as the efficient causes and means of man's instruction. We have first the theory that human beings were produced not only in ones and twos, but in multitudes as speechless as brutes, a theory which, by the by, does not account for speech at all, except as a lucky accident of dumb endeavour. The next theory supposes an intuitive inspiration to speak, as a matter of course, even before language was needed. The third theory accounts for words by man's sympathy with outward nature that has no words.

1. An example of the mute origin of language is that of the Rev. Dunbar Heath, M.A., F.R.S.L., F.A.S.L., who explains the peopling of Europe and the rise of tongues by supposing that European apes at one period abounded, and that these were the fathers of European men, who were at first dumb, but who at length 'gasped after articulation' and got it. He says: 'I confine myself to the accepting and explaining known and knowable phenomena. It is known that anthropoids existed throughout Europe. It is knowable that they became mute men. It is knowable that those mutes gasped after articulation, and in a few spots attained to it. Those who did so at one particular

spot, I call Aryans, whether that spot was in Asia or in the submerged continent of Atlantis.' Those who would know the knowable and learn how red apes became mute men and then gasped after articulation, may possibly discover the *modus operandi* in the article referred to; or, if they fail, they may blame the blood of the red apes still meandering through their dull brains, for the theory is expounded in a manner quite appropriate to the theory itself, with more of the knowable than the known, and perhaps more of the knowing than the knowable.

2. The intuition theory is practically expressed by Milton, who, however, writes rather as the poet than the philosopher, and seems in this matter, as in several others, to have misread the narrative on which he ostensibly founds his poem. He thus makes Adam reply to the inquisitive angel who wished to be informed how he happened to be such a good conversationalist:

. . . to speak I tried and forthwith spoke; My tongue obey'd, and readily I named Whate'er I saw

Why the first man should thus exercise his talents in naming what he saw when names were of no use to anyone is not very evident, even poetically speaking. Such a meaningless exuberance of talk only reminds us of certain unknown tongues, too unreasonable to be attributed to inspiration as a Divine gift. To utter articulate sounds as a mere play of the speaking faculty

* Anthropological Review, No. xiii. p. 36.

is common to childhood, that happily plays with all things till it better knows the earnest needs of life. Nor would we for a moment deny that there may be incident to the many gifts of the human spirit the joy of uttering a gush of words in the excitement of the mind under the consciousness of a present Being capable of understanding such an utterance of feeling as of the most genuine and sincere character. But such eccentricities of speaking do not pertain to common conditions of reason; and we have no reason to imagine that the first man spoke until he had been so spoken to as to learn the use of words as the vehicle of thought from mind to mind in a rational manner.

3. The sympathetic theory may be regarded as one with the theory which attributes the origin of language to man's innate tendency to imitate the sounds in nature, and to employ them as indicative of the names and the actions of things associated with those sounds. The senses, the emotions, the imagination, the will, are undoubtedly excited by all the sounds of nature. Our attention is thus called to the wondrous variety of this world's moving energies. The wind that moans or whispers with the trees may be suggestive of the wandering of miserable or of loving spirits amongst the branches, and thus awaken either happy sympathy or wild panic fear in man, according to the aptitude of his own spirit at the time. He hears the rolling beat of the monotonous and melancholy waves, the startling crash and echoing roar of the loud thunder, the dash of the cataract, the rush of the river, and the undersong of the bubbling runnel amidst the grass, and each in its turn evokes a corresponding state of mind in man; but the language in which he would convey a sense of his feeling or his thought concerning the powers which thus impress him, can borrow but small help from his attempts to imitate any of the sounds that thus arouse his feeling or his thought. The sensitive and cooperative organs of hearing and of speech are not excited into the action resulting in the formation of words by any but articulate voices, and the man who never heard the human voice in speech would be without the power of converting a single sound of nature into a word. He may listen to Nature, but he cannot learn to speak from her: she does not speak—he can learn to speak only from a speaker. Having thus acquired the art of utterance, he may and does incorporate varied imitations of natural sounds into his language, and form them into words suggestive of the objects which produce them. Thus, doubtless, much of the power of words in common use is due to the aptness with which they present the idea and the action of the creatures suggested by the imitative sound of the The words cackling, clucking, crowing, quacking, chirping, cooing, grunting, mewing, velping, snarling, growling, hissing, roaring, may bring a whole menagerie before the mind's eye and ear; and we may imagine a concert of cocks, hens, geese, sparrows, doves. pigs, cats, curs, serpents, and lions, naming them in the order of the words suggestive of the manner in which they use their voices; but then we see at once that

these imitative sounds are not, and cannot be, the names of the creatures, and relate only to a small but ready childlike means of indicating some of their qualities—enough to remind us of them, and no more. Such words cannot be employed in rational speech without associated nominatives and verbs, not derived from imitation, but from ideas of abstract qualities with which sympathy with sounds and onomatopæia seem to have very little to do.

All the voices in the world speak in a sense to the soul of man, and he is their only interpreter. All the vast variety of utterances bursting so freely from the heart of all animated beings endowed with voice. expresses pain or pleasure to awaken a corresponding chord in the heart of man. He rejoices in the glad song of the trilling lark, fluttering with the sunshine in the blue of heaven, for it speaks of love and the nestlings hidden under the green flag of the springing corn. If his spirit be attuned aright, the tiniest note that vibrates on the air touches his soul to sympathy. He discriminates between the wailings and the warblings, and, if he be a poet, he may clothe the feelings they inspire in words to make others feel the soul in He thus may utter his own thoughts and sentiments to his fellow-men; but neither his thoughts nor his words are directly derived from sympathy with outward nature, but only from his own instructed heart and understanding. Outward nature is as void of sentiment as of words. Yet every living creature has a mode of its own to evoke a suitable response in every

corresponding nature, and brute replies to brute, bird to bird, insect to insect, because they all possess their instincts in relation to each other with appropriate means of fellowship. They have not the voice of words, because words are the vehicle of thought, not of sensation. As there is not an articulate sound in nature out of man, he cannot draw even the elements of language from any source but man. Even he can and does express the presence of pain and pleasure as mere bodily conditions without words, for words are needed only in response of mind to mind, to express a reason or a want. He never imitates the sounds in nature to convey a reason or to ask a question, for the speaking soul is not an echo but an intelligent agent. We have no disposition to respond to birds and beasts and running brooks, nor to imitate their voices to express what we think of them. We may name a creature, as we do the cuckoo, by the syllables in which it seems to designate itself; but to construct a language on this principle would be childish work, since with all such helps from imitation we should leave all actions and attributes unrepresented, all the silent objects of nature without vocal equivalents, and all the interests of reason and humanity without utterance. In short, as the capacity of language is only the faculty of receiving words already associated with thoughts, a language must be made for man that he may receive it, and the only imitation in the process is that of his effort to possess the advantage of speaking like some other who can teach him. It is true that, having language, man can

modify it by a thousand accidental circumstances, and new forms of language are constantly arising from the play of the mind with new sounds; and the contact of tribe with tribe is thus apt to produce lasting changes in their words as they intermingle. The spirit of Babel appears still in the confusion as in the diffusion of tongues; but in as far as philologists, like Max Müller, trace all languages 'to roots predicative and demonstrative, it is clear that, according to the manner in which roots are put together, we may expect to find three kinds of languages.'* Hence Max Müller thus accounts for the formation of all known languages which are represented -1. In the Chinese; 2. The Turanian, or agglutinative family; 3. The Aryan and Semitic varieties. And as a large proportion of the roots are common to them all, there exists a strong indication of their original unity. Now, as a root word consists of but one syllable, and as the very copious language of China, at least, is altogether monosyllabic, there is very strong presumption against the theory which assigns the origination of language to imitation. Such facts indicate that in the original language of mankind every syllable held its appropriate value in some idea associated with it, which well comports with the circumstance that the number of syllables is fixed by an inexorable law in the physiology of speech, which renders it impossible for the mind of man to invent a new syllable.



^{*} Science of Language, 1st series, p. 273.

A careful study of the interesting case of Laura Bridgman, the deaf blind mute, would throw much light on the origin of language. She uses the affirmative nod, the negative shake of the head, and the imperative stamp of the foot, and other signs of mental action which she has not acquired, but which, as intended to express her feeling to others, she must conceive as perceptible to them. But what is most remarkable, she expresses her ideas and emotions by sounds which, of course, cannot be onomatopæic, and Dr. Lieber discovered that she employed about sixty vocal sounds, mostly monosyllabic, as signs or names of individuals known to her. Thus she possesses the innate idea of language, making sound unheard by herself yet representative to herself of impersonations and associations of specific ideas and opinions. exercises a deliberate selection and change of sounds to express certain ideas and alterations of feeling, being guided, doubtless, by the diverse perception of the effects produced on her own organs of speech.*

As Dr. D. Wilson observes (in *Prehistoric Man*):— 'If language be primarily a Divine gift or instinctive faculty, in which the organs of speech respond to conceptions of the mind, as other organs act in obedience to mental volition, hers seems to be a case where the assumed phonetic types or roots of language ought to be traceable. But while the interjectional element of

^{*} On the Vocal Sounds of Laura Bridgman. Smithsonian Contributions, vol. ii.

language is clearly recognisable, that of onomatopæia is precluded.'

Without attempting to elaborate the argument that, with all the aids of metaphorical conception, it would be impossible to explain the formation of words which express abstract ideas on the principle of onomatopæia, we conclude that man was not left by his Creator to acquire language as he best might in the struggle of his necessities as a rational and social being, but that he received the gift of language not merely as a capacity but as a revelation or teaching, demanded alike by that capacity and all the requirements of his perfect reason, directly dependent on his Maker for the supply of all his wants. Without speech man had not been complete in reason. Nor can we imagine the first human pair grotesquely coming to an understanding by the help of mere dumb show and pantomime, with their fine sympathies and imitative faculties called into exercise, by repeating with staccato distinctness to each other the cries of animals, or by mumbling the sounds of the running waters or the living winds. Neither can we suppose them consenting to express ideas by soft and hard, sharp and flat, weak and strong combinations of consonants and vowels, according to the theory of M. De Brossés.*

Man was created either in his highest state or his lowest: the most degraded of savages or the noblest of beings. If civilised from the beginning, he has fallen



^{*} In his Traité de la Formation Méchanique des Langues.

from his high estate; if as low as he could be at first, he has wonderfully elevated himself. If he was not provided with language as soon as he needed it, he was worse conditioned than any of the human race now existing. The question is not whether God is a respecter of persons, and less a loving father to the Australian and the negro than to the man whom he had immediately created, but Did God make man more degraded than man is permitted to make himself? Why man is permitted to sink into a condition from which he can be raised by Divine love and mercy is a question that belongs alone to the scheme of providence in which that love and mercy are revealed.

The wisdom of Omnipotence will doubtless be manifested to all intelligences even more clearly in the means directed to the recovery of mankind from all evil than in creation itself, which, as a divine work, without an intervening will, was necessarily all good. Creation is less a revelation of God's mind and character than the method of salvation or healing of human nature. The process of salvation, however mysterious in the sovereignty and disposal of the providential arrangements connected with it, is a process of means in which human as well as divine agency is engaged; and, therefore, the means are themselves modes in which the divine character is most fully revealed in humanity. But creation was an operation without means, being the immediate act of Divinity, with which, as human intelligence could have nothing to do, so neither can it have any capacity to comprehend.

In the elevation of mankind from the savageness and barbarism into which sin and its consequences have immersed the majority of our race, thoughts derived from Heaven and spoken by men are constantly engaged; nor without them can mankind emerge from degrada-No other power and instrumentality are equal to the occasion; no other could so completely bind man to man, and make all men feel that God is with them both to think and to do. And as the earliest civilisations known to us were due to the dominance of traditional truths concerning the divine claims on the obedience of man, and as those civilisations fell into ruin in proportion as those claims were forgotten, so now there is no power at work to elevate the degraded races of mankind but that which reaches after them with those revealed truths which all the civilised nations more or less possess, and to which their high standing in polity and commerce is alone to be attributed.

True knowledge is the knowledge of the Divine will and working on which all good laws are founded. With the increase of this knowledge man's capacity to think and speak aright extends. His language itself grows in comprehensiveness, copiousness, and power, in proportion as intelligent, instructed, and religious minds intermingle their enquiries and opinions. Their faith, their reason, and their good feeling enlarge together, and with pure thought comes also purity of tongue; nor is it beyond conception, that the very words in which the Divine mind was first uttered unto man

should yet be found upon his lips as he improves in his capacity to entertain divine ideas.

The spirit of Babel lives in all tongues, and the confusion of language is involved in the diffusion and growth of mankind. When a language becomes fixed and refined it begins to die; the people that employed it die also, leaving the new race to new associationsand living language can no more be fixed than a living people. It is modified because it grows, and it grows because it lives. When the whole earth is compassed by the same truth, the nations may have the same tongue; when all men consent to derive their ideas from God's works and God's word, the language which contains the best expositions of true science, and the best translation of the Bible, will prevail; and as it stands at present, the English, from its force, simplicity, directness, and comprehensive character, bids fair to become the universal language at last, if allowed to grow in a natural manner, and not impoverished by pedantic attempts to improve it.

CHAPTER XXI.

THE FIRST LANGUAGE NECESSARILY TAUGHT.

SEE how speedily the deaf-mute learns to talk to himself in the finger alphabet with a kind of shorthand rapidity while actively thinking, and how he even dreams of things as it were on the fingers, as they move with their instructed association also in sleep. But by a still more laborious and patient skill the deaf-mute has been taught actually to speak with distinctness and correct accent as if capable of hearing. This striking triumph over natural defect is achieved by instructing the deaf-mute to observe and imitate the movements of the organs employed in speaking. Those organs and their actions are so carefully demonstrated by the example of the skilled teacher, that the pupil is by slow degrees at length able with quick eye so to catch the movements of the lips and chest of the speaker as to learn language by sight instead of hearing. necessarily exercised in teaching such persons thus, so to say, to see words and correctly to express themselves is marvellous. The writer for several successive days held long conversations of a very mixed character with a lady thus instructed, and she so perfectly caught his

words by sight, and replied with such correctness of modulation and connectedness of utterance, as to strike him so powerfully with the evident force of her intelligence that he had not the slightest suspicion that she was deaf, though afterwards informed that she was not only deaf but born deaf, and had never heard a single sound.

This lady's intellect had actually been, so to say, developed with the use of words acquired only by sight. Until thus taught, her mind-power of course appeared as defective as her means of communication, for the reasoning faculties are fully exercised only in connection with language. Hence, in Hebrew idiom, to think is to speak to one's own heart. As William Humboldt says, 'Man is man by speech.' Therefore, it follows that He who gave the first man his rational faculties also provided means by which they were called into proper exercise, that is by imparting to him speech by actual instruction through the natural channel-the ear. Man could speak when he found there was speech. And where could man have found this fulfilment of his reason had not He whose thoughts are uttered in creation also by some means actually addressed man's ear in words, as signs of things, and of moods of thought in relation to things? He who has so lovingly arranged our relationships, that by an imitative sympathy the young child gradually catches the significance of syllables breathed from loving lips, and echoes back at length the utterance of thought and feeling in kindred accents, could not leave His first created human child-a child

indeed in knowledge of facts, though mature in faculty of mind-without a voice and presence to evince a love fully equal to the exigence He had Himself made. The organisation by which thought becomes articulate in words is naturally excited into action by the impression of language on the ear; and if the speech-organs are in a normal state, the power of speaking follows on hearing speech, as if by an involuntary reflex action, almost as readily as smiles awaken smiles: soul answers soul, as face answers face. Thus, as soon as a child is capable of fixing attention sufficiently to discover that words are employed as signs of feeling, it begins to imitate them; and it is one of the most charming things in nature to listen to a young child reiterating with delight a new word which it has learned to utter as a matter of feeling, even though without any distinct ideas attached to it. To speak it and to play with it is a power and a joy. At length words with their meanings thus take possession of the memory in such a happy manner that we think in words. The importance of impressing and eliciting the mind of childhood in conversation, with an easy and pleasant familiarity which shall convey pure thoughts in pure language, cannot be too strongly insisted on, since the earliest impressions are those which form the basis of the future character, as respects both the heart and the intellect.

We always speak to our own inner ear while we think, because we really acquire both thoughts and words together through the ear at first. Hence, what is clearly spoken reaches the understanding and the feelings more readily than what is read in silence, until we have attained such a facility in reading that the written or printed words find a kind of echo in the mind, and become as if audible to our understandings. In fixing words upon the memory, we repeat them to ourselves till we get them, as we say, by heart; and, in endeavouring rightly to clothe our thoughts with words, we inwardly speak as if listening to our own utterance. So completely are thinking and language associated, that in certain conditions of mind we think aloud: and were it not for the social necessity of keeping our current thoughts to ourselves, we should be apt to be always prattling to our own spirits, like children rejoicing to play as in the company of their own voices, when debarred for a time from fellowship with others.

'Man is man by speech,' and to condemn a man to silence is to extinguish his manhood. Even a monk of La Trappe, if he talk not in his dreams with angels and with saints, can only become mad by communion with his own mind; and that habitual criminals should become insane or idiotic in solitary dumb confinement, where even the jailor dare not speak, is but the natural result of leaving men to improve themselves by thinking, with nothing better than themselves to think of. Even brutes, roaming the wilds of nature for their food, cheer each other with voices, and would die without a sense of fellowship with creatures of some sort; how, then, should a man, endowed with reason on purpose for converse through eye and hand, and attitude and

utterance, with kindred beings, feel other than a blank existence in a world, to make him only conscious of his wants, without another to look into his face responsive to his soul and draw him from himself?

If all the conditions of human intellect were not met with their appropriate provision in the first man, he could have been nothing but an incongruity in creation. Without words, his intellect and reason would have remained dormant; and, therefore, as surely as there is a faculty in human nature that corresponds with the tones and modulations of speech, which would have remained utterly useless in a dumb life, so surely must words, with the Word in them, have addressed that first human soul to awaken the full feeling of its own humanity. To make man was to include speech as a gift, to be willingly received.

The acquisition of language in the child is as slow as its own mental development, and as language is necessary to a process of thought, the increase of thoughts as well as ideas is one with the increase of our vocabulary; therefore, that man should be taught language was necessary to his completion as man. In a man complete in all his faculties, the lessons in language must have been equally complete. A perfect man demanded a perfect language. Less than he needed could not have been given, and what he needed who could give but He who created him? But a perfect language must have been, in all points, expressly adapted both to convey all ideas which the human mind could possibly receive concerning the nature of

things, and at the same time be precisely such in its structure as best to accommodate the marvellous power of human utterance, while satisfying the faculties that thus sought their fulfilment. In short, the first language could not have been deficient in its fitness to express whatever belongs to the pure mind, either of tenderness in affection, clearness in truth, or force in faith. It was divinely human and as fit, so to say, for the ear of God as of man, equally adapted to ideas of the known and to thoughts of the unknown, to utter adoration or instruct a child.

The lessons in this language were not received according to the slow processes of mere responsive imitation, as in the dawning of intellectual light and life upon the mind of childhood, with its inherited wrong bias of brain. They were lessons in the grammar of thought from a mind to a mind. Ideas arose, as sense after sense was awakened to receive appropriate impressions from outward things. The soul was behind the senses to perceive and to interpret. As the senses were aroused and the soul attentive, then was the time to make language one with idea and thought. Then, indeed, by the very process through which the child learns at once both to think and speak, man would learn, but with a man's capacity. The kindling spirit would receive words in immediate association and connection with the perception of things indicated, so that the words, being exactly calculated to represent those things, would, so to say, be incorporated in the memory, together with the ideas of things themselves. The

idea of the symbol, a word or name, would be impressed audibly, together with the idea of each thing, or sensible impression, of which it was thus necessarily to be regarded by this association as the symbol. But the word or name was a sign of wisdom also; it meant a nature. This seems to be the most rational conception of the origin of language as a divine impartation. the senses opened to the consciousness of the outward world, and the man awoke to consciousness of himself, reason, with all its faculties and intuitions, was at once met with the most appropriate expression in language from an outward Voice and Presence. These responded to man's enquiring soul in expressions of thought and feeling, both by words and looks, as object after object claimed attention. Thus objects, ideas, words and mental powers would all be realised together as the creations of the inspiring and speaking Presence. Thus all knowledge and thought, as first acquired, would be a gradual revelation, not only of the nature of the outward world, but also of the corresponding inward cosmos of man's own faculties, in their relations alike to the creation and to the Creator. And thus, in truth, it ever is; man is revealed to himself in proportion as he learns the meaning of what God has made for him to know, and precisely in the same proportion man receives also the revelation of the Divine attributes. Man, left alone to do his best with his uninstructed intellect, never looks through nature up to nature's God. Man must be taught truth, and, through whatever means, God is Himself the Teacher.

Possibly we find no trace of the primeval language in any tongue now spoken. That language might have been so constructed that, as in geometry and algebra, the signs, the syllables, the words should be homogeneous with absolute truths. The power which created the mind could certainly so make known the nature of things by an especial intuition for the occasion, that an audible verbal sign connected with the thing thus made known, should stand not merely as a name for that thing, but also for what that thing itself meant. In short, as all nature has a spiritual significance in its minutest parts, the knowledge of which is absolute philosophy, so the words conveying that knowledge to the mind of man might become the expression of the physical, moral, and spiritual laws of the universe. What a vast advantage would it be to our reasoning now had we a language for use totally exempt from all ambiguity, and in which terms could not possibly require definition, because each conveyed its own especial value. We have a certain untoward attempt at the construction of a language somewhat of the character and power supposed, in the numeral symbolisms and lumbering compound names employed to express the recognised truths of chemistry, for instance. But we can imagine all the truths of this or any other science demonstrated seriatim to the human understanding, and impressed on the memory in such a manner that the names applied to those truths should not only express and recall those truths, but also their relation to each other, so that a single word should

possess the power of showing all the possible actions of the thing to which it applied by a kind of logical declension in its form and combination of syllables. Nor would a language thus constructed be so difficult thoroughly to learn as many now in use. All the substances and living things known to man are named, and notwithstanding the awkward, trivial, unmeaning character of much of our scientific nomenclature, there are men who have the whole pretty much at command. But if a true principle had been observed from the first in naming and classifying objects, there is no reason why the language of common life should not also have been the language of true science. A language of Divine origin would necessarily have been perfectly adapted for the purpose of expressing all possible truths, as well as all that man could feel or think concerning them. Would that we had a tongue that might express the divine idea really existing in everything! That alone would be fit for universal use, and fully worthy of reason when willing to obey the Spirit that inspires all truth and the love of truth, without which philosophy is only a false word and a deception.

Some of the oldest languages existing, such as Sanscrit and Hebrew, seem to have been constructed designedly as by one mind, with a view to their development by the accretion of any new idea or discovery; and though those languages, like the rest, may prove themselves to be but fragments, broken off from some earlier stock like branches planted and trimmed under another cultivation, yet possibly in them, if in any,

some indications of the first language may still be found. We may revert to these languages, but they are now referred to rather in favour of the argument that as the Hebrew and Sanscrit present signs of being each elaborated by a single presiding mind, there is the greater reason for believing that the primeval language was God's own production and personally given to man. How, otherwise, could the first man become capable of speaking but by having some one before him to whom to speak? And who should be the Person and the Power to teach the man made perfect in will, intellect, and organisation, but He who is the Maker of mind and of man? He alone could fulfil the necessary conditions; He alone could become a Presence, a human Presence; and He alone could impart living words, who was able also to impart ideas, because He could produce them. By no other conceivable process was it possible that feeling, intellect, and will, could first be educated. or memory be endowed with right association between words, ideas, and thoughts. There could have been no phantom produced in the mind of the first man to represent in idea a human being as speaking to him, and no created intelligence could have assumed the human form for the purpose. The idea of a speaking being would require first the objective reality to produce the idea. Speech must have reached man before he could have imagined a speaker; and a phantom is the offspring of disordered fancy; but God's creation is all real. God alone could have first spoken to man, since none but the I am could speak in the first person

with the authoritative voice to instruct reason while He evoked it, and to command conscience while He made that one soul thus capable of perceiving duty, which could then have related only to that soul as bound by the gift of reason in a covenant with the faithful Creator who thus provided what reason needed. Thus only can we imagine created reason becoming articulate in speech, and therefore that record is no violence to reason, but, on the contrary, well accords with the philosophy of the subject, which implies that the Maker of man was man's instructor, and which affirms that God from the beginning of man's existence spoke with man face to face, as man speaks to his friend—one reflecting the other in word and thought.

It is articulate language that distinguishes man from lower creatures, and were not man a creature with reason and faith, therefore also a moral being, with the social relations arising from the possession of conscience, speech would not be proper to him. Speech, as the organ of reason, implies the power of forming abstract moral conceptions, as well as abstract notions of physical qualities; it must present ideas of righteousness, beauty, truth, and love, as well as of things palpable to the senses, and even if it could be shown, which it cannot, that brutes have faculties capable of inducing true thought, yet no race of animals possesses a language in which to express thought. A sufficient proof this of the absence of any mental condition demanding the aid of words, since we know of no creature in its normal state denied the faculty and the

organisation necessary to the fulfilment of its desires. As language results from the power of abstraction, or, as it has been expressed, 'of making general ideas of which words are the general signs,' * we are constrained to conclude that brutes possess not the mental power of abstraction by which ideas and thoughts are formed, and therefore need not, as they have not, the organisation required for the utterance of words. Language, thenarticulate language, word-making-distinguishes man from other earthly and living beings, because it pertains to thought and requires an appropriate organisation for its utterance. Thus, words constitute the frontier between the human and the brutal mind, a frontier that can never be surmounted or removed, and which at once presents a protest against all theories that would confound the nature of man in mind and body with the nature of the brute creation.† Physical emotion may be expressed without articulate words, but not so thoughts; and as lower creatures possess physical feeling, each proper to its kind, so have they the power in mere inarticulate sounds of expressing their feelings, and

^{*} Locke.

[†] Abstract or universal ideas are those which the mind makes on observing the same qualities in different substances. Thus chalk, snow, and milk are white. Locke comprehends these single perceptions under the general or abstract conception of whiteness. If it may be doubted, whether beasts compound and enlarge their ideas in that wa to any degree; this, I think, I may be positive in, that the power of abstracting is not at all in them; and that the having of general ideas is that which puts a perfect distinction between man and brutes, and is an excellency which the faculties of brutes do by no means attain to.'—Locke, book ii. ch. xi. § 10.

of awakening, by such sounds, similar feelings in creatures similarly constituted. And so has man, most of our interjections being of this nature; and doubtless a good speaker could produce, without pantomimic aids, a very moving appeal to our sympathies by the adroit intonation of merely oh and ah, though any edification as to the reason of his oh and ah would require words that express thoughts as well as feelings. nature is alive with feeling; every vocal sound, every living motion, every twinkle of the wing in bird or insect, is significant and stirring with the sympathies of desire or of delight; but man alone asks questions and frames replies, for he alone intends, seeks meanings, utters thought, and adds a moral purpose and a reason to his motives. Socially, politically, mentally, morally, man is a creature that makes exchanges, and language is but the medium of interchanging sentiments of which all the converse of souls consists.

Language mainly consists of names for things and abstract ideas; and even verbs are but modified nominatives. To teach man appropriately to name is therefore a divine work. 'A man can teach names to another man, but he cannot plant in another's mind that far higher gift—the power of naming.'* God alone can do that; and therefore we suppose man's power of speaking was first really exercised by affixing appropriate names to the creatures which surrounded him, an impossible feat until he had been taught words

^{*} See Thomson's Outlines of the Necessary Laws of Thought.

and meanings. Our most masterly philologist, Max Müller, has mistaken the argument for the divine origin of language in his Lectures on the Science of Lanquage.* He says: 'A few voices have been raised to protest against the theory of language being originally invented by man. But they, in their zeal to vindicate the divine origin of language, seem to have been carried away so far as to run counter to the express statements of the Bible; for, in the Bible, it is not the Creator who gives names, but Adam.' 'Out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought them unto Adam to see what he would call them; and whatever Adam called every living creature, that was the name thereof.' To exercise the power of naming implies language as already existing; and to test the power of man to give an appropriate name to any creature can mean only that man thus put in practice the gift of intelligence and expression, known by previous use to be equal to the occasion.

All analogy constrains us to believe that man was speechless until he heard some voice uttering syllables adapted to his own speech-organs. He who made man's organism made man's language for him. Man could not create language, he could only learn it. And the Being that first taught man to speak must have known what were man's powers to articulate vocal sounds. However constructed, probably the primeval tongue con-

^{* 1}st edit. p. 29.

tained every syllable man is capable of expressing. No human being can invent a new syllable. This fact seems to indicate that every possible syllable had its fixed value, and was originally associated with some idea or conception according to its position, intonation, vehemence or softness, abruptness or gentleness of breathing. An approximation to a language thus constructed exists in the Chinese, which is at once the most elaborate and the most childlike of tongues.

The Scripture narrative of creation consistently represents the Creator as speaking to Adam, before Adam was called to give names to creatures. The Presence of the Lord God is subsequently recognised as also the Voice, which, as a name appropriate to the Person known by speaking, is said to be walking in the garden, as if to indicate the accustomed manner of Divine converse with man. The Hebrew phrase, walking with God, always means personal communion in spirit with the Father of spirits, as if the phrase and the idea were derived from the first announcement of the fact that the Deity in manifest Presence, and with human voice, did really walk and talk with man, when man would otherwise have been in mental solitude and silence. That the Voice was thus heard and associated with the Presence in the garden in the cool of the day, shows plainly, and in a beautiful manner too, that the accommodating revelation of the Creator to man had been experienced habitually under these circumstances, as if man had been accustomed literally to walk with his Maker in the cool of the day; though now, under conscious guilt,

instead of seeking the presence of God, man attempted to hide himself from His face, in fear and shame as we should. The mention of the cool of the day suggests that the warmth of the climate was such as to render the shade of evening agreeable to man, and therefore in adaptation to man chosen as the appropriate period for Divine converse with human weakness.

Of course the Almighty could inspire man with language as well as thought; but if we are to refer to the narrative as authoritative teaching on the subject, which the writer fully accepts, then we see a sufficient reason why the *Voice* and the *Presence* should be spoken of, for thus we learn how man might have acquired language, so to say, in a natural manner, and are prepared for the actual conversations between God and man which follow, wherever needed for Divine purposes, as shown in the Bible.

The whole of Max Müller's lectures on language, so far from invalidating the argument that man was taught language by the Creator, rather indicates that he could have acquired it in no other manner, since there is not an instance of any language ever having been invented by man, all languages being, in fact, traced up as to a centre where all the known radiations and variations of speech unite. It is as if all the diversified streams of language had flowed from one source, and become modified by admixtures and confusions as they passed on from people to people; the employments and mental conditions of the different nations, as they sprung up and extended, altering the

character of each stream according to their demands upon it. In short, to drop simile, when mankind lost their national unity they also lost the unity of their language, simply because there was no influence inoperation to regulate the use of words by restraining caprice in modifying the significations originally attached to them. The dislocation of syllables from each other, their employment with new associations of idea, and the consequent formation by degrees of new grammatical constructions, would naturally result. Hence, that master of philology, Max Müller, sees no reason to doubt the possibility that the three great divisions in which he includes all known languages, the Aryan, the Semitic, and the Turanian, sprang from He says, 'Nothing necessitates the adone origin. mission of different beginnings for the formal elements of these branches of speech. It is possible, even now. to point out radicals which, under various changes and disguises, have been current in those three branches ever since their first separation. We have examined all possible forms which language can assume, and we have now to ask. Can we reconcile with these three forms the admission of one common origin of human speech? I answer decidedly, Yes.'* He further adds: 'In the grammatical features of the Aryan and Semitic dialects we discover the stamp of one powerful mind, once impressed and never obliterated, but perpetuated as a law through generation. Most words and gram-

^{*} Lectures on the Science of Language, 1st ser., 1st edit. pp. 326, 315.

matical forms in these two families seem to have been known but once, by the creative power of an individual mind.' Now, that individual minds should have thrown out such 'primitive works of human art,' and left their stamp upon them for so many thousands of years, proves this much, at least, that minds there were in that primitive time capable of higher intellectual effort than has at any time since been evinced or exerted; and if the Aryan and Semitic forms are due 'to the creative power of an individual mind,' how thence is it to be proved that man invented the first language? If the Aryan and Semitic branches of language be but dialects of some earlier form of speech, that earlier form is still more likely to have presented evidence of 'the creative power of an individual mind.' But as each dialect of language must have had the advantage of a preceding example of speech, wherein the power of an individual mind was evident in its structure, the power of mind exhibited in the formation of a new dialect would have been exercised rather in the way of imitation than of creation. And as each new growth of variation in language was at most but a varied branch springing either from some other branch or direct from the original stock or stem, that original must have been more surely the direct production of an individual mind than any of its branches. fore, as man has never shown himself capable of inventing a language or discovering one, but, at best, can only regulate by art the grammatical outgrowth of such spontaneous modifications of language as may

arise from change, admixture, loss, confusion, and imitation, we infer that the first language was not invented by man, but was actually taught to man by the creative Mind in actual converse with the human mind, according to the narrative which supplies the Presence and the Voice, as if essential to the conception of man's first condition as endowed with full reason and instructed to speak.

Doubtless, had man been inspired with wisdom to construct language and grammar for himself, the origin of language would be still in a very direct sense Divine. But as man is really not endowed by nature with any faculty ready for use without education, and as an adult and mature man, perfect in form and brain, would be absolutely without intelligence but as derived from instruction, it is more consonant with man's nature to conclude that he learnt language, not by his own unaided power of mind from creation, but from the Creator Himself, who always accommodates man in a manner unneeded by other creatures, that is by peculiar and even so-called miraculous interventions appropriate to his condition. This view of the matter is but consistent. It brings humanity more immediately into its right place, into fellowship with Divinity, into contact personally with the Life that is the Light of man. It is but the beginning of the fulfilment of man's created right, by which he claims to be a pupil of the Divine Logos. It is like Him that He by voice and presence should instruct man, when otherwise man must have been but as a yearning soul left in utter destitution,

276 THE FIRST LANGUAGE NECESSARILY TAUGHT.

surrounded by a speechless solitude, with all to learn and none to teach; with faculties of reason, if awakened only to feel 'the burden of the mystery of all this unintelligible world,' like the heavens upon Atlas, an unmeaning weight and vastness, crushing the might of a lonely spirit to no purpose.

CHAPTER XXII.

THE PRIMEVAL LANGUAGE.

It is impossible to discover what was the structure and grammar of the primeval language, but there is something in the nature and character of the Hebrew which has induced many profound thinkers, as well as great scholars, to believe that, or a language of similar formation, the language first uttered. As Max Müller observes, it seems to be the production of an individual mind; a rational design runs through its whole formation. If, as some assert, it is unfit for the use of a speculative philosophy, it is so only because it is so perfectly adapted to express what is positive in relation to nature and to man. Since it is so completely in keeping with the nature of things as to be fully equal to the expression of all known qualities of mind and matter, it looks as if formed on scientific principles. No language can possibly be more simple, and yet none can be more comprehensive. While capable of expressing all conditions of things, it is also peculiarly adapted to express thought as well as emotion. It is evidently built up, shaped, adjusted, and regulated in a manner that could not possibly be unintentional or accidental.

All its native roots are formed of three consonants. with their inherent vowels, making two syllables, a fact in itself strongly indicative of design. Oken observes, in his usual oracular manner, that 'the most perfect language is that in which the consonants always hold their own vowels as space does time, never allowing the utterance of a vowel without a consonant.' * Judged of according to this principle, the Hebrew is the paragon of tongues, since it not only excludes the utterance of a vowel without a consonant, but by the vowels also expresses the grammatical and local relation of each word in a sentence. Thus, Hebrew is in thorough contrast with the speech of savages, in which detached vowels always abound, seemingly for the very reason that a vowel standing alone is an inarticulate sound, caught, as if without effort, to utter feeling without thought, as with brutes. Of all Semitic tongues 'the grammatical structure of the Hebrew is clearly the most ancient. Hence, of many forms the origin is still visible in Hebrew, whilst all traces of it are effaced in the sis-'A great number of Semitish roots are ter dialects.'t found also in the languages of the Indo-Germanic stock.' 'The affinity between Semitish and Indo-Germanic roots has been fully exhibited in the Latin edition of Gesenius' Hebrew Lexicon.'1 Thus the extreme antiquity of Hebrew asserts itself.

It is a remarkable circumstance that the Hebrew has no

^{*} Physio-Philosophy, § 2899.

[†] Gesenius' Hebrew Grammar, Introduction.

¹ Ibid.

material adjectives, and that one noun so often qualifies another; thus, a holy place is in Hebrew a place of holiness. Hence we see also that there must be an abstract idea connected with every noun as well as verb in the language. Hence, too, we perceive how perfectly this language is adapted for metaphorical expression, while at the same time the structure of the language seems to preclude the notion that it could have resulted from mere imitation of natural sounds, because every word has an abstract idea included in it. The nouns or names of things and persons are all expressive of ideas conveying thought; thus, the word expressing sin also implies loss as well as expiation; that expressing darkness signifies also deprivation. In fact, there is no language so apt for naming, and therefore none more likely to be primitive.

No existing language has borrowed so little or yielded so much, most of its radicals being found in other oriental tongues, which may, with the Hebrew, have been derived from some anterior source common to all, but which the Hebrew has evidently not derived from them, and which they may possibly have obtained from the Hebrew. Whatever its origin, it is certain that things and facts of life with all divine thoughts are more easily, succinctly, clearly, and forcibly expressed in this tongue than any other. This fact, at least, however accounted for, is patent to the world. Hebrew has been chosen by Providence as the vehicle of the sublimest ideas which man has ever conceived, concerning the relation of man to the Divine existence, the nature

of moral law, true repentance, the fall of man and his recovery. This fact is sufficiently demonstrative of its fitness for the purpose, seeing that the thoughts contained in the one Hebrew book, the Bible, are the basis of the highest forms of thought, of civilisation, and theology, the world has ever known. This circumstance alone would go far to warrant the ancient presumption that Hebrew was the language in which mankind were first taught the connection between all knowledge and religious truth.

The instruction contained in the Old Testament is more readily and naturally transferred into every other tongue, than is possible by translation from any classic language; and the Hebrew being unencumbered with expletives and direct in its construction, its simple grandeur is best evinced when most literally rendered, as we have it in our own mother tongue, the English Old Testament being the best treasury of thoughts and words in our language, and for majesty of diction, pathos, poetry, and strength of utterance, the noblest book in any tongue. As Addison says, 'Our language has received innumerable elegancies and improvements from that infusion of Hebraisms which are derived to it out of Holy Writ, that give force and energy to our expressions, warm and animate our language, and convey our thoughts in more ardent and intense phrases than any to be met with in our own tongue.'*

Farrar, in his earnest and eloquent defence of the theory

^{*} Spectator No. 405.

which attributes the origin of language to mere imitation of nature's inarticulate sounds by man, boldly asserts that the Hebrew tongue is altogether an onomatopæia.* But if onomatopæia be the ground out of which all the roots and stems of language have grown, the fact that so many Hebrew words are supposed traceable directly to that source, would go far to prove that Hebrew was the first language. And, on the other hand, if for other reasons Hebrew can be shown to possess evidence of its primeval origin, then it would follow that onomatopæia was the origin of human speech. But, in fact, however imitation of natural sounds and voices may have contributed to diversify the stock of words, there is no evidence to show that the most familiar names of things, and their relations, could have originated in this manner. And, moreover, the almost invariable construction of Hebrew words by the union of three consonants to form two syllables, each of which seems to have possessed originally a distinct significance, is entirely against the notion that the language originated in imitation, but would rather imply that the power of the human voice-organs to form syllables was the ground of the language.

That Hebrew was the primitive language seems to be assumed in the Hebrew Scriptures, since the reason assigned why the first mother was called Eve, and why both the first man and the first woman were called Adam, is found in the Hebrew meaning of these names. Of



^{*} Chapters on Language, chap. xiv.

course it may be said that the text does not assert those names to be the veritable names at first applied to those persons, but only that their appellations, in whatever language given, signified so and so. There is, however, no intimation of any such idea, but rather that those and all the names given to persons and places among the first inhabitants of earth, were really what they are stated to have been; and the very nature of the case in relation to the words thus employed, implies that they are not to be regarded as translations, but as the words originally used. This argument for the primal antiquity of Hebrew is approved by many learned authorities, even though not receiving the Hebrew narrative with implicit credence as of Divine origin. Buxtorf has laboured to prove, on intrinsic grounds, that this language was imparted to the first parents of mankind by God Himself; and certainly those who deem the Book of Genesis written under Divine inspiration will experience no difficulty in adopting Buxtorf's conclusion, since the book itself seems to assume, if it does not assert, the fact. And it is only on the presumption that the Maker of man has never verbally revealed anything to man concerning his own origin and his relationship to heaven and earth, that the literal truth of that book, so far as 'the Word in the words' is concerned, can be invalidated; for if that book do not contain that verbal revelation, neither does any other, and man knows nothing about what he is most concerned to know-the end for which he was created,

and his necessary moral relation to his Creator from his beginning. That Hebrew is the most ancient of tongues may also be inferred from the fact that, as the Gomeric, either in its Cymric or Celtic types, underlies Sanscrit, Latin, Greek, Egyptian, Gothic, Lithuanian, and Sclavonian,* so Hebrew underlies the Gomeric as well as all dialects of the Hamitic type.†

- * See Bunsen's Christianity and Civilisation.
- † See also The Mosaic Ethnology of Europe, p. 129.

CHAPTER XXIII.

MAN AND WOMAN.

Whatever may be our notion as to the character of man's first language, and however we may endeavour to explain its origin and employment, there can be no doubt in any mind that articulate speech is the vehicle of human reason, in contradistinction to whatever may be the vocal medium of expressing impulse and sensation in brutal minds. And as man, if distinctly created, did not pass into the activities of breathing life inspired by Heaven, fresh from the moulding touch of the Divine hand, with the stamp of incompleteness in any of his faculties, the power of uttering thought in appropriate words must speedily have found occasion for its development and exercise by some process best adapted for the purpose, devised and put in force by Him who made man, with aspirations to hold communion not only with man but also with his Maker. There is really no conceivable mode of manifestation to man's mind but by embodiments that shall influence his If we have abstract ideas, yet these could have been derived only as phenomena were calculated to excite those ideas in the mind as constituted thus to be

excited. Some sensible sign must indicate properties and conditions before we can possess metaphysical conceptions. We must perceive an object before we can conceive an idea. There is no teaching but by the senses, and man cannot apprehend anything concerning the Divine nature, but as it pleases God to reveal Himself in a human manner in accommodation to human nature, which is created to be the image and reflex of the Creator. If man, mentally and morally, is to endure as seeing Him who is invisible, except as humanly revealing Himself, the Deity, until so revealed, must remain an abstraction to our minds, inferred to be a . person, because will and reason in man persist in saying I am; therefore, as I am a personal being, a personal Being must have originated me. But Christianity not only confirms the inference, but affirms the indwelling of 'the fulness of the Godhead bodily' in a man, Immanuel, so that the abstract conception of Divine Personality becomes a fact to the Christian believer who sees the Father in the Son revealing Himself in word and deed. There is therefore no outrage to reason in imagining any degree of 'anthropomorphism,' any degree of Divine accommodation to the faculties of human nature, by which man might feel and know by visible and audible evidence that God Himself was man's inspirer and instructor, in the conception and utterance of thought, in modulated sounds and syllables as the signs of ideas, objects, and emotions. But reason does not warrant the supposition that Omniscience placed two persons together in total ignorance of all things, as

associates for each other, to evolve a language for themselves by their mutual endeavours to become intelligent and communicative.

As a great thinker says, 'Who taught thee to speak?' By that question does he not imply that some one taught the first man to speak? He talks, indeed, of 'the day when two hairy-naked or fig-leaved human figures began, as uncomfortable dummies, anxious no longer to be dumb, but to impart themselves to one another; and endeavoured, with gaspings, gesturings, with unsyllabled cries, with painful pantomime and interjections in a very unsuccessful manner.'* But surely he is sneering at the imitation theory. No human figures ever held such foolish dumb-show with each other since the first pair, and if 'we think their lot was thus uncomfortable and unsuccessful, we must impiously imagine their Maker producing an absurdity never otherwise seen in this world.

No; the Divine method is to prepare one mind for another. And therefore when the first man was endowed with language, however taught, he was qualified to become the teacher of one who should be not only in the position of a companion, but as such grow into intimate endearment as the recipient of instruction from his loving heart. When man had language, he was not long without a being by his side akin in nature to himself, with whom to hold sweet fellowship, who should derive from his own accordant lips and speaking looks

^{*} Carlyle's Past and Present, p. 175.

the understanding of a soul inspired by love and endowed by Heaven, to utter and convey heaven's own language to another heart and mind made on purpose for unison of thought and feeling with himself. As it was the purpose of the Creator to constitute the first man the federal head of a world's history, the creation of woman was a necessary consequence of man's own existence; and what more fitting to the perfection of the oneness between man and woman than that she should find and feel in him her union with her God, while he should own in her the glorious being given to him by God, in evidence of God's crowning love for the completion of his own being? 'He for God only, she for God in him,' or rather both for God, because both the one for the other. To learn of him was to know Divinity already humanised; and as the glory of the eternal Light had been softened by a Presence and a Voice to accommodate his reason, so she found a divine Power permanently present to her heart in man. Thus the kindred sociality of natures formed to correspond in mutual meetness was breathed from soul to soul. Thus words laden with the warm incense of the first man's heart and inspired with his inner life, his God-taught spirit, awakened in that other outward and inward life of woman a responsive vibration, imitative as an echo, to the music of his uttered love and thought.

Thus the man himself was known by his words at first, for every man is what he is in utterance; and thus all are to be judged by their words, the outflow of their wills in signs that speak their spirit. Sermo imago

animi; qualis vir, talis est oratio, and thus the first man became an oracle to the first woman, as man with reason divinely taught will ever be, as surely as truth belongs to love and both belong to reason.

We have seen a prisoned spirit in the person of a deaf-mute, in whom reason seemed waiting in vain to hear a voice that should enkindle a new life and satisfy a felt want and impart the fulfilment of the heart's longing as it watched the beaming eye, the trembling lip, the changeful waves and colour of the cheek, glowing with a feeling to which words were useless. And we have fancied how that imprisoned soul would have loved one who like the Son of God could have unstopped the deafened ear and liberated that soul from silence, and taught it to drink knowledge from the fountain of sweet music and of speech. But here was a soul free and open to receive from a man, a Son of God, intelligence and love fit to bind two souls together. And thus together were the first man and woman bound by words and thoughts and corresponding faculties in life and fellowship.

What a marvel of wisdom and benevolence is the gift of speech with its adaptation to the receiving ear and the perceiving soul behind it! What a wondrous, common, forgotten thing is the structure of the aural and vocal instruments by which mind so rules matter as to send thought and feeling along the pulses of the air from spirit to spirit, toned and attuned to express and awaken the faculties and affections of the soul by words! Surely the first pair who learned to converse together

must have felt that they lived and moved and had their being in Him who had made them for each other, and had given man speech that he might impart it to his other self, in fulfilment of the promise and the prophecy which that Divine gift of necessity involved. whether speech were taught to man by God, by angels, or by the struggle of his rational soul to articulate a response to the spirit uttered in the voices of all creatures, the power of speaking did not signify that God, or angels, or the many souls in nature needed words, but that language was given to man in anticipation of his fellowship with woman, who with him should found a human world, bearing truth on in speech from generation to generation, spreading through all time the record of the thoughts, the feelings, the fancies, and the faiths of the past and the passing, into the bosom of the constant present, while meeting ever the coming and eternal future.

Upon the breast of new-created Earth Man walked; and when and wheresoe'er he moved, Alone or mated, Solitude was not.

He heard, upon the wind, the articulate voice Of God; and Angels to his sight appeared Crowning the glorious hills of Paradise.

WORDSWORTH.

But that voice and the sight of angels, if he saw them, were not in the nature of things to be the perpetual evidences to man's heart and understanding that God and God's angels were about his path. Humanity was to walk in its own fellowships. And when man was prepared to feel that God and angels were above and about him, and he was inspired by the perception of the Divine ordinance in his own nature as a man, he also felt that there was to be a partner of his being with whom to participate the use of language, in the utterance of reason and of love, with the consciousness that the fruitful earth should be peopled with their offspring.

But seek for objects of a kindred love
In fellow-natures.

But that Voice, which was one with the expression of thought, love, reason, left not, nor could leave, man to his thought, love, reason, and speech, until the fulfilment of his nature in his fellowship with that other nature, alike but different, through which humanity is completed. Had God withdrawn his Voice and Presence, man without woman would have died of loneliness, the very rocks would have mocked him with their echoes, and all nature would have said, The master-soul of the world is but a lone self, a breathing mass of solitude, an I without a Thou. But to imagine man as not including woman is to imagine an impossible fact, a purposeless unilateral humanity; and, as surely as man beheld the wonders of creation with no brute gaze, but with intelligent consciousness prompting him to say, 'My father made them all,' so surely would he feel the demand within him for a corresponding person who might adore with him the common Parent, and live forward into a futurity full of interests, ever expanding in variety and greatness, because spreading from themselves through a boundless progeny.

For what is life to man without enlargement in human communion and relationship but that of a being unconnected; touched, indeed, on all sides by extending lines of life, but yet forming no part of any series himself? An isolated immortality in a social being means eternal death. It is not thus that God gives immortality to man. He does not isolate the human soul from human kindred, kith, and kindness, and then invite that soul to fuller fellowship with Himself, the Author of all relations and all loves; but He takes His place in our humanity and makes it perfect. And this He does by calling woman mother, thus rendering the one human kind, in all its history and all its interests from origin to end, one with His own existence in humanity. Thus God gave immortality to man by taking man's nature into union with His own, that man might, in the fulness of God's verity, thus become partaker of the Divine Nature as a heritage for ever, not in figure, but as a fact to be recognised and realised only by the power of that imparted faith which takes in full the meaning of the words committed to our hearts and lips by that Son of God who bade us say 'Our Father.' When out of man Omnipotence made woman, He made provision against all sin and weakness by implanting in womanly nature the power of restoration through the birth of that

T 2

Holy Child who should teach and illustrate the truth of love and the love of truth, and make it possible for the spirit of holiness proceeding from the Father and the Son, the human and the divine, to enter the human heart through Faith, and thus renew all human hearts, in that moral and authoritative image and representative of God which corruption of the will alone destroys. Nor are we at liberty to separate what God has joined. together through the union of the first parents of mankind in innocence, with the restoration of our fallen humanity, by the birth of the Perfect Man out of the fallen flesh, as the fulfiller of all righteousness for us It is thus the man Immanuel claims to and in us. represent in His own person all the offspring of the first mother, as redeemed in Him who destroyed death by dying and obtained immortality for us.

And was there not unconscious prophecy of this fuller fellowship with God through woman in the aspirations of the first man for fit companionship? His demands upon Creative Power, Wisdom, Love, in thought and language, were but as foresights of what he would be in union with another having nature like his own, responsive, correspondent, the same yet other, in soul alike but different, and with both the likeness and the difference enlarging and advancing through the revelations of truth and love in all humanity. Thus man found the complement and reflex of his own being in woman. The gift of speech and thought to man was a promise fulfilled in woman; for is not that gift, the utterance of faith, love, reason, a demand, effectual as a righteous

prayer, for the further gift of whatever faith, love, reason, may require for their completion?

Thus, perfect woman must have, in fact, been brought as if by the Creator's hand into the presence of perfect man, that he might learn directly all the Divinity imaged in her being, that he might know himself also as God's likeness, and that each in the other might perceive that God is Love. Is there a child that thinks in words, who 'knows no better than to interpret by the letter' the story of the making of woman out of man, or to think of it as any other than a mode of expressing the moral as well as the miracle of man's unity of existence with the woman's? And this, too, without in thought refusing to see the possibility of the figure being also the fact, for the means and the mode of the Omnipotent in creation are but immediate acts of His will, and to form another human being from a part of man is as divine an act as to breathe into the dust and thus make man.

With the creation of woman, then, human creation was made perfect, not merely because man alone would remain alone, 'housed in a dream at distance from all kind,' but because with woman came all the after possibilities through womanhood, all the mysterious sublimities of sin and suffering, with all those results that brought heaven into unison with humanity. The human motherhood has brought forth for death, and is constantly replacing the dead by the living, but all the dead are alive unto God, for He is not God to the dead but the living.

But how was man to recognise woman as one in substance and nature with himself, bone of his bone, and flesh of his flesh, unless by something in the mode and manner of her creation that should demonstrate to his soul that her life was but as an extension of his own, and that she was essentially and for ever one with him in the heritage of immortal life and love? The man who dreams by day or night with any lower sense of feminine humanity and loveliness than that which the majestic masculine soul of the grand Puritan, Milton, puts in poetic thought before us, in the imagined first ideas of woman as possessed by the first man, but proves himself degraded below the proper standard of a man.

Greatness of mind, and nobleness, their seat Build in her loveliest, and create an awe About her, as a guard angelic placed.

What higher, in her society, thou find'st Attractive, human, rational, love still,

said the admonitory angel, whom Milton* made to talk a little too much theology perhaps, but whose philosophy with Adam might be studied with advantage in these days.

And the man or the woman that loves anything less than the Divine image stamped upon the outward form and the inward character, or believed to be, is in love with a demon, assuming a delusive and destructive loveliness, but whose beauty and whose breath will

* Paradise Lost, book viii.

blight the loving soul with a living death, the very power and presence of personified perdition.

The thoughts and heart enlarges; hath his seat In reason and is judicious; is the scale By which to heavenly love thou mayst ascend, Not sunk in carnal pleasure.

MILTON.

CHAPTER XXIV.

WORK, DOMINION, WORSHIP.

WORK for man and woman is the first essential of their happiness, since without the active employment of their mental and manual powers the faculties themselves lie dormant, for the will that ends in wishing without effort is a force that runs to waste.

'Genuine Work alone, what thou workest faithfully, that is eternal, as the Almighty Founder and World-Builder himself.'*

Man hath his daily work of body or mind Appointed, which declares his dignity, And the regard of Heaven on all his ways.†

Appointed work means responsibility as well as enjoyment. It requires intention to fulfil duty. It is the carrying out of a design in co-operation with God, who shows man what he should do while giving the knowledge and the power to do. Therefore he works best who worships while he works and feels that God works with him. By work with thought every man can create a new world for himself, by bringing into new combi-

* Carlyle.

† Paradise Lost, iv.



nations the forces of nature which without man's mind and hand would not fulfil all the ends for which they were created; and thus man's reason is the key, without which much on the surface of this world would remain without a meaning. That is the true religion that sanctifies labour and throws light and life into it. Just as the sunshine of a former world imparted heat and light to plants that are treasured in our coal-fields for our comfort and our commerce, so all the revolutions of the earth's surface during the grand æons past have but prepared the hills and valleys of this world for man's abode, and provided the materials on which his intelligence may work for the advancement of civilisation and the extension of human life, knowledge, and enjoyment. Nor can man be conscious of his own true dignity, but as he devoutly follows out his duty as an avocation and a calling, by the very voice of Providence that with the daily demand supplies the power and the means by which it is fulfilled.

What, then, was the work appropriate to the first human pair, but that which should cultivate their own faculties in relation to God and to the forms of life around them as made by Him? Their minds were constituted to understand the principles and powers at work in nature, as at work for them and with them. The outward world in all its wondrous adaptations and co-ordinated influences was in correspondence with their own inward world of thought and feeling. All things were for use or beauty. They could estimate the useful and enjoy the beautiful; and all their mental endow-

ments would aptly find and fulfil their purpose in cultivating everything that could be turned to use or made available for innocent enjoyment. Their business could have been nothing else but to learn and to apply what was good as a means of sustaining life, and making it more joyous in themselves and other creatures subjected by their nature to human art for the extension of their happiness. The animal creation was not beyond the domain of man, and from the first the protecting hand of thoughtful industry was needed by creatures endowed by their natural defencelessness with power to claim help from man and to obtain it. Let us not imagine for a moment that the marvellous method by which life is drawn out from death had no existence in the beginning; nor let us arrogate to ourselves the right of calling that form of death an evil by which the Overruler extends the dominion of life which is itself a good, even though it involve death which is no evil where not by anticipation seen. The balance which we now witness between destruction and renewal. life and death, was doubtless in the constitution of this earthly mode of things at first, and whatever that may symbolise and typify, as now teaching us to look forward for the revelation of all mysteries, we see not there the death and the life which man may find or lose; his life, his death, are not material changes or conditions, but a state of being in respect to the character of his will and spirit. Possibly, as already . intimated, translation without passing through bodily death to a higher sphere amongst the hosts of heaven

would be the normal issue of an earthly life matured in actual godliness; and had the first man been preserved from falling, he and all his race as they advanced to the fulness of age, instead of passing into decrepitude, might, as a natural matter of course, have passed on like Enoch to a higher mode of being, and joined in some more glorious world those elder sons of God who shouted for joy when this earth came forth in light, replenished, as the preparatory dwelling-place of man.

The fulfilment of man's prescribed duty as the cultivator and subduer of all the forms of power and of life in this renovated world, included the employment of his faculties towards the development to the full of all that pertains to beauty and to usefulness. Man was to provide for all his wants of mind or body, by taking advantage of his own endowments to render his mental mastery over nature subservient to the increase of his capacity to enjoy aright whatever the Creator had placed under his control. By his mind, he was as by right to dominate, not by domineering, but by fostering all the forms of life for his own convenience as the loving lord of all. Whatever his free soul demanded of innocent delight in the exercise of power was to be obtained by the exercise of that power. possessed a sense of beauty as an essential ground of his intelligence and fellowship with Heaven. He was therefore to cultivate the feeling of the beautiful by cultivating the appropriate beauty inherent in everything that lives. Nature ever holds out to the hand of man means by which his reason, when rightly employed, may be enriched with true gold from heaven's treasury. And even now, in proportion to the restoration to heavenly enlightenment, we perceive that every kind of beauty and power is but an embodiment of truth, a form of love, revealing the relation of the Divine creative Mind to loveliness, symmetry, and justness, as well as expressing tender thought towards the susceptibilities of all His sentient creatures, but especially for the instruction and happy occupation of man himself. And what is the teaching of the beautiful, but that it is subservient to use? What is the ultimate purpose in all the varied pleasantnesses brought forth to sight in the growth of every plant, each in a beauty of its own, in every stage of its development? All sorts of leaves, branchings, flowerings, are but prophetic utterances of a spirit labouring for fruition. Use is the soul in nature. Beauty is the incident, beside the main design. every germination springs from a treasured life with which the elements are all in sympathy to promote its coming forth in the charms of its full attire, bearing in its arms a multiplied extension of the life from which it sprang. Thus, living beauty in its true character ever intimates a promise of fruition, which is one with usefulness, on a larger scale, still ministering an ever wider enjoyment, interrupted in its increase only by the sinfulness or ignorance of man.

If, then, the first man could not fulfil his mission in the high purposes of his manhood as a reasoning being, without the means of cultivating all that should minister to the gratification of the senses and the soul, the installation of his dominion over all living nature demanded the exercise of his faculties in a scientific manner: that is, the necessary knowledge must have been imparted to him concerning the nature of things in relation to each other, before he could have had reasonable motive to exert his mental and his manual powers. As to suppose the first man less endowed with reason than even the highest, noblest form of man that has been born of woman, is to suppose the God-made original inferior to the offspring, we are constrained to conclude that the first man was endowed with a capacity to discover the design, meaning, or purpose of things around him as well as any man that ever existed. But are we to infer that he was left to feel his way towards a knowledge of the nature of things about him by slow observation and experience, without instruction to direct his reason? That were to suppose the first human being less favoured than any that has since come into existence, or else to suppose him more than human. No; he was the child of God, and as he was taught correctly to speak so was he likewise taught to think aright; and to think aright is to know the true nature of things. mind was furnished by instruction with all the elements of the purest civilisation, the knowledge of the Divine attributes, and the meaning of God's works, or he could not be a perfect man, prepared to work on true principles as the head of the earthly hierarchy, a priest and king by creative fiat. If science now shows us how to bring forth the latent powers of nature to ameliorate the fallen condition of man, or if reason, enlightened by religion, sees somewhat of man's relation to his Maker, it can be but as a degree of restoration to the truth and wisdom possessed by the first man.

There was science because there was faith; there was art because there was reason in his mental empire over material things. There was an effort made with a healthy and a noble purpose to subdue all the ministries of nature to human uses. There was the ground of true civilisation, the application of right instruments for producing whatever may contribute to man's comfort as an active, sensitive, reasoning, working spirit.

This is the foundation of all the arts and sciences the effort to increase that which is for use and apply that which is for beauty, the most perfectly practical combining beauty with use. But, above all, that art and that science is most useful which is devoted to the production of appropriate food, for on this depend the health of households, the wealth of nations, and the commerce of the world. All other industry is maintained by the cultivation of the ground, and, thanks be to Heaven! the most necessary labour is most conducive to manly vigour; and the promotion of fruition in pasture. field, and garden is nearly allied to the cultivation of all things pleasant to look upon and listen to. Arcadian peace and plenty would be no fable were hearts and minds cultivated with a religious devotion equal to the care now bestowed to produce fine herds and plenteous But even amidst all defects the finest instructed souls grow up in rural scenes where the works of God are studied with a natural leisure and delightsomeness. And what we behold now of the triumph of horticulture and the feeding of flocks had its origin in the informed work of the first family. We do not assume this because we have been taught it in the school of parental dogmatism as a truth to be received in faith unquestioned by our reason. We may indeed believe it well and simply because reasonable and loving souls who prayed to God have told us so it was. come to plain matter of fact; we have evidence before our eyes, existing now in what we eat and drink, that the first man must have been instructed, or, if you please, inspired with knowledge, to cultivate the soil. And we may even assert that he had absolutely put into his hand by his Maker that seed, producing bread, on which he and his children were mainly to live, and for the preservation and increase of which he was, with all diligence and thoughtfulness, to labour. For is it not a fact that those grasses, the Cerealia, which bear bread-corn are nowhere growing wild so as to produce a harvest to be reaped by man without man's previous handiwork?*

They exist only as cultivated products of the soil; they perish, at least to human purposes, without man's care; therefore it is fair to infer that they must have been cultivated from the first, and that he who first tilled the ground must have been taught to teach his children to grow corn. The corn-bearing grasses are exceptions in nature; they do not bud, they die out

^{*} See Balfour's Class-Book of Botany, p. 708; Barclay's Manual of Botany, p. 697; Knight's Food of Man, vol. i. p. 22; Lindley's Elements of Botany, p. 112.

annually after seeding, yet, unlike other annuals, they do not propagate themselves; they become degenerate or overrun by wilder growths, for, when left to nature, they quickly disappear. In short, their propagation and preservation as food-producers are dependent on the art and science of man, and, as far as we can discover, always did require artificial aid for their development.

It is a curious fact, however, that the chief corn plants—wheat, oats, barley, and rye—are said to be transformable the one into the other by certain modes of cultivation, a circumstance, if true, fully confirming their exceptional character and demonstrating their need of man's especial skill for their proper growth as the food of man.

The following letter, dated Wappenham, near Tow-cester, Northamptonshire, appears in the *Berkshire Chronicle*:—

In answer to your letter, dated December 2 [1862], it is a positive fact that I grew both wheat and barley from oats. The wheat I continued to grow up to last year; but in consequence of the crop going off, I was obliged to fill it up with spring wheat. The wheat I grew from the Dutch oat was a beautiful quality, small seed, weight 65 lbs. per bushel, light-coloured chaff, fine straw and blade. The wheat I grew for about ten years, and sold lots of it to my neighbours for seed. Now, I am growing a coarser wheat that a neighbour of mine grew from the Poland oat. That is a much stronger straw and larger ear, but is very apt to mildew the last few seasons. The way I adopted was to plant it thin, under a sheltered wall, the middle of June; it then will require to be cut off about one inch from the ground before coming into bell, three times the first season; the following year it

produces the wheat I speak of. Many people saw it when growing: it was a very thin berry the first year. The difficulty is in keeping the root to stand the winter. At the Towcester Union theirs produce barley, and mine has the same from a coarse oat. Black oats will produce rye in the same way. You are quite at liberty to make use of my name.

From yours truly,

WILLIAM COWPER.

Mr. Charles Simmons.

The Arab farmers believe that both wheat and barley are, if neglected, transmuted into tares (zowan, Arabic; zizanion, Greek); but the notion only shows their lack of scientific observation.* That wheat, barley, oats, and rve should be but modifications of the same . plant under varieties of cultivation, is a startling discovery; or, if not, it is an unaccountable mistake which we can scarcely conceive possible. Yet it is wonderful that the discovery was not made before, seeing that the conditions under which oats are said to have produced wheat must have very often existed. A check upon the growth of the oats, such as may occur by cattle feeding on them as they shoot up, would be sufficient. 'The difficulty of keeping the root to stand the winter' may explain all, and it would have been more satisfactory if Mr. Cowper had informed us how he overcame that difficulty.

But, taking it for granted that the oat thus artificially treated will produce barley or wheat by strengthening the growth of the root, it would be desirable to carry

^{*} The Land and the Book, by W. M. Thomson, D.D., p. 421.

out the reverse experiment, and to show how, by certain kinds of treatment, wheat would produce barley, and barley rye, and rye oats; for, if we could thus degrade the growth backwards, we might perchance discover the wild origin of wheat; or, at least, produce M. Fabre's Ægilops triticoides, and resolve that into Triticum and Ægilops ovata.

Wheat, barley, oats, rye may be the same thing under different conditions of cultivation, yet millet, maize, rice are probably not from the same origin; and it is evident that the method of cultivation by which wheat might be produced and preserved from degradation was taught by some one so long ago, that science may well accept the brief history of man's converse with his Creator, as given in the book of Genesis, as a sufficient explanation of man's universal possession of that method. The life in wild vegetation is too vigorous to suffer the cereals to gain a place upon the earth without the protection of man. Every green thing is at war with the staff of human life. Every soil declares by its spontaneous products that man is literally to gain his bread by the sweat of his brow. Thorns and briars, with all the weeds, and even the kindred of the cereals, the grasses, must be rooted out to make way for corn. They indeed, in a manner, prepare the ground: by their death and decay, they furnish the sod with the nourishment which man thence draws forth for himself by means of the seed he scatters on the furrow. Unless the land lie often fallow, that the wild growth of weeds may gather from the favouring

skies as well as from the earthy elements the materials that form our bread, man's hand must collect and spread out the manures which man has found requisite for the growth of corn. He must clear, dress, and till the ground. His supernatural will and reason must be exercised so as to control and manage the perennial laws of nature, or they will exclude him from the field, and refuse to yield him any harvest.

That a plant like wheat, on the right cultivation of which the civilisation of the world so much depends, should have been brought by accident to the perfection in which it has been known historically to have existed for more than four thousand years, is not conceivable. And the toil and struggle against nature involved in man's cultivation of any of the cereals forbid the notion that man invented them for himself, and constrain us to conclude that the law of God which imposed the labour of tillage upon man, was not imposed until man had been instructed in the art of producing corn, for which he was to labour that he might live. The toil expended on the ground brings a blessing out of that on which, without the blessed hopefulness of labour, a curse, a something opposed to the comfort of man, would for ever rest. But with the power of growing corn man possessed the evidence that God was working Thence mankind should be able to attain with him. their happiest social condition, and with the righteousness of a true commercial spirit, under the government of a worship that acknowledged the Almighty as the friend of every upright and peaceful family, civilisation should advance till all the kindreds of the earth 'beat their swords into ploughshares and their spears into pruning-hooks.'

The early tradition of the fact that men were taught by the Deity to cultivate corn, is evidence that the ancients did not believe man capable of inventing corn.

They knew that nature did not spontaneously produce it, and yet that it was essential to man's well-being. What, then, could they think but that it was a Divine gift? And with all our science we are forced to the same conclusion. A product of scientific tilling and dressing so important to man was not left to man's unassisted skill, but was worthy of that instruction which we must suppose the first man to have received, in order to the peopling of the earth with a civilised humanity; nor can we conceive that there ever was a time in the history of mankind when seedtime and harvest were not known.

On this subject Niebuhr strikingly asks, 'Whence, then, comes grain? It is a direct gift of God to the human race. To all mankind some sort is given: to the Asiatic, wheat, barley, oats; to the American, maize. This circumstance deserves earnest consideration; it is one of the evident traces of the education of the human species through the direct guidance and providence of God.'*

'In respect to the predominating kinds of grain the earth may be divided into five grand divisions or king-

^{*} Vorträge über alte Geschichte, vol. i. p. 21.

doms: the kingdom of rice, of maize, of wheat, of rye, and, lastly, of barley. The first three are the most extensive; the maize has the greatest range of temperature, but rice may be said to support the greatest number of the human race.'*

These cereals all require cultivation. That they should all have been accidentally produced to retain their habits through the course of ages only by the aid of man, is not consistent with experience and reason. And that they should all have been produced artificially by man's uninstructed skill is equally improbable. Nature does not generate them; and therefore, had not God given man the cerealia to cultivate, and taught him how to grow them, man would never have possessed them, and there would have been no corn in the earth. Man has never discovered how to produce them from wild grasses.† Their existence now in all their varieties is a proof of the Creator's converse with man, as when He said, 'Behold, I have given them to you for meat.'

It is said that the soil of Babylonia is so peculiarly adapted to the wheat-plant that it even grows spontaneously in that region, though nowhere else, so far as we know, on the face of the whole earth.‡

^{*} Lindley's Elements of Botany, p. 112.

[†] It is stated that, in 1838, M. Esprit Fabre produced certain grains by hybridisation between a species of Triticum and Egilops ovata. This hybrid he called Egilops triticoides, and this, after twelve years' careful cultivation, gave rise, it is said, to a grass bearing a grain precisely similar to that of wheat. Still professors of botany are constrained to say, that 'wheat is the abnormal state of some plant unknown.'—Balfour's Class-Book of Botany, p. 708.

[‡] Rawlinson's Ancient Monarchies, vol. iii. p. 304.

That the soil of Babylonia should be so exceptionally adapted to the growth of wheat, as to cause it spontaneously to grow in that region, can scarcely be accepted as a fact without further evidence. Since wheat degenerates if left without cultivation in all other regions, it may be suspected that if wheat has been found apparently growing wild in Babylonia, its presence there is also due to some degree of Arab cultivation, which has been overlooked by observers who have hastily asserted its spontaneous growth in that region.

This much, at least, appears certain: 'Man has not added a new grain to those cultivated four thousand years ago. He has not developed another grass to produce food beyond the grasses grown for this purpose in the earliest days of Egypt, on the sculptured monuments of which we find wheat, barley, and rye.'*

Not a stalk of corn remains where man is not. If corn cannot now live without man's aid, it is an unavoidable inference that man was instructed from the first to cultivate corn. So strong has been the conviction of all ages, that the cereals are not spontaneously produced, that the mythologies of India, Egypt, and Greece ascribe their cultivation to direct Divine interference. The Medes, who were the descendants of Medai, a son of Japhet,† and among the earliest of recorded nations, certainly anterior to the Chaldeans,‡ connected their notions of piety with the cultivation of the earth as a

^{*} Sunday Magazine, Oct. 2, 1865.

[†] Genesis, x. 2.

Rawlinson's Ancient Monarchies, vol. iii. p. 159.

duty enjoined on them by God. Hence, also, the angel of the earth, Armaiti, was regarded by them as engaged under the supreme God, as labouring to convert deserts into fruitful fields, and assisting those who are so employed, in obedience to the everlasting law which no man dare abolish.

According to Berosus, the ancient historian, a native of Chaldea, the Medes had conquered Babylon at least 2,000 B.C.*

It is not unimportant in this connection to find the idea, that there should be a divine-human deliverer of man born of woman associated with the gift of corn to the human race. Thus, an ear of wheat was the typical symbol of the true seed, the bread of life from heaven, among the Egyptians, as we see in the zodiac and planisphere of Dendera,† where the Virgin-mother is represented as bearing in her hand an ear of wheat, and is associated with a figure carrying a ploughshare.

As Mr. Vivien stated at the meeting of the British Association, in Birmingham,[‡] no trace of the existence of the cereals can be discovered in geological formations that can be imagined more than 6,000 years old; and the same may be confidently affirmed of the domestic animals.

Man is deficient as a mere animal. Nature contains no provision for him unless he can cultivate and subdue her energies to his purpose. Unless reason be brought

^{*} Ibid.

[†] The original is in the Museum of the Louvre, at Paris. The date, 1730 B.C., has been repeatedly deduced from the figures of the zodiac.

[‡] September, 1865.

into exercise, the beasts and reptiles are his superiors in respect to accommodation and supply; they are bountifully furnished with food by the spontaneous products of the earth, but man is dependent for his daily bread on his power to employ art. But by what physiological law does his hand obey his will to fabricate the instruments necessary to the cultivation of the earth and the satisfaction of his wants? There is no power in his bodily or mental structure that, without teaching, could enable him to win his best nurture from earth's bosom.

The precarious pursuits of the hunter and the fisher, unaided by the cultivation of corn, would leave man without the leisure to become civilised, or to take a single step towards a higher condition of society than exists among savages. If he had not corn of some kind, neither could he have cities; and were a blight to fall upon the cereals, and God's essential gift to man be thus withdrawn, the civilisation of the world would at once be suspended, and the nations would be in perpetual struggle for the means of life.

When man was instructed how to produce corn the education of the world commenced, for all the arts and sciences had their origin in that teaching, without which man would have been curtailed of all opportunity for development in thought and practice. Man must always have been dependent on instruction, since without it reason, which distinguishes man from the lower creatures, would have discovered nothing but its wants. And as man, without a direct gift, could never have possessed corn, so neither without corn could he have

advanced to the invention of any of those arts which now accommodate and adorn humanity in every civilised country. Every man who labours to live, by whatever means, was taught by another how to labour. There never grew spontaneously a paradise for man; neither could he make one, adapted to the demands of his high nature, unless instructed how to till the generous ground. The conditions of man's reason call for a preceding and higher reason to direct it. Man stands in contrast with all other living beings in that he must be educated in some degree to fulfil the purposes of his existence. Animals by birth and nature are provided with all the ability necessary to satisfy their instincts without training, while man with all his reasoning powers is helpless until supplied with knowledge by a mind already furnished. To experiment with nature's fruits till he had proved their uses would have been a fatal process to the first man, if constituted like any of his children; and without supernatural interference, the guidance and instruction of the Hand and Mind that made him, he had been but as a creature endowed, indeed, with reason, but destitute of the means by which reason could alone avail itself of the powers of nature for its own well-being. As education is a necessary condition of human existence. and as the first man could have had no other instructor than his Maker, He instructed him; and if we had no other evidence of the fact than the existence of corn, that would suffice.

The interest of man in all living creatures is especially

worthy of reflection, and his dominion over nature is in no respect more remarkable than in the advantage he has taken from the knowledge of their habits, powers, and dispositions to reduce many animals to servitude, using their strength in the cultivation of the soil, in carrying burdens, in bearing their master to subdue the earth, or in the happier service of the swift messenger, the traveller, the merchant. In every such case we trace a fitness in the creatures to meet and fulfil the purposes of man, and in that fitness we see a probability that they were, at a very early period in human history, employed as means of advancing civilisation. And, indeed, its very commencement would seem to demand their aid, and we see not how man, in his more extensive social and national relations, could have existed without them. It is at least evident that there is no civilisation at present in the world without agriculture and the cultivation of flocks and herds, and, therefore, we may infer that civilisation never existed without them, and that when they existed there were present the elements of the highest social condition. But, as on the ground of the natural necessities of man we have concluded that he was a civilised being from the first, so we conclude that the gentler animals, especially sheep, must have been under man's protection, for the purpose of furnishing him with proper clothing, from the first. The defencelessness of sheep adapted them peculiarly to the purpose to which they are, as if by their nature, everywhere devoted. It is even questionable whether they could have thriven in any climate,

exposed as they everywhere would be to the ravages of the carnivoræ, without being regarded as the especial possession of man, and therefore continually under his tendering and protection.

If theologians can discover any reason in the nature of things why the lamb should have been appointed as a sacrifice even in the first family, that would also be a reason why flocks should have been among the earliest possessions and cares of man; for if lambs were used as an offering to signify faith in an atonement made by the substitution of the innocent for the guilty, that offering must also have signified the acknowledgment on the part of the offerer, that the creature offered was given to him by God as a means of supporting his own life, and that his own life, and all possession included in it, ought to be devoted to the service of his Maker.

As man possesses in his own organisation many of the bodily powers and instincts that belong to the lower creatures, living as they do as if only by reflex responses to external influences, without self-consciousness, just as many of our automatic actions are performed; and as man has also in his body all that pertains to the necessary instincts by which life is maintained under sentient contacts and consents, he is so far in sympathy with all living creatures, and so is fit to manage them, because he so far knows them. He has the capacity of designating and characterising them according to their manifested formations and propensities: so to say, he understands what they are. He can see why they need no instruction, for understanding

has nothing to do with their actions; he sees why special organs are used for appointed purposes; why the nautilus has a siphon to assist in rising and descending in the water; why the fishing frog angles for its prey; why the chameleon darts forth its tongue to impale its insect victim; why the crocodile has a valve in its throat; why the bat has a hooked wing; why the kangaroo has a pouch for its young; why the porcupine is clothed in spikes; why the camel has several stomachs; why the torpedo has an electrical apparatus of a thousand six-sided prisms; why the female glowworm bears a living lamp like a star-gleam amidst the summer glade: and thus, in all the innumerable instances in which peculiarity of organisation is associated with peculiarity of habits, man can discover, where he has the opportunity of observing, that every creature is empowered by its formation to use aright the instruments with which it is furnished, and that without any instruction. He can, therefore, discover that it is not very becoming in Mr. Darwin to speak of 'a little dose of judgment or reason coming into play, even in animals very low in the scale of nature,' since no known amount of judgment or reason in themselves will account for their capacity, which evinces itself in a manner to prove that there is a power beyond human reason at work in all the operations of animal nature; and that of necessity, because every thing that lives, except man, is governed only by the law of its instinct, for its construction is such that it needs no instruction, as man does. The uniformity of animal instinct

is in correspondence with the physical laws of the universe, and therefore against all animal transmutation.*

But man needs to apprehend, acknowledge, and obey other laws than those of the physical universe for the fulfilment of his being; and, without moral laws for the correction of his motives, as well as the impartation of intelligence for the instruction of his intellect, man would be utterly at variance with the purpose of his existence. His dominion is exercised and evinced, first of all, over himself; it is that of rational will and free agency alike over the spontaneous impulses of his body and of his mind. And having this control over himself, by the enlightenment of his reason and his conscience, he is able to assert and maintain his dominion over nature, and become a philosopher and a Christian. He then sees before him and behind him, below him and above him, being in sympathy alike with things earthly and things heavenly. But he knows that his will, although capable of warring against Heaven, is really free and boundless only so far as he wills to obey the intuitions by which he feels that the goodness of his Maker is, by the necessities of goodness, engaged to draw man ever upwards to Himself, as to the eternal inheritance of reason. In all his aspirations after larger knowledge and higher bliss, he exercises

^{* &#}x27;The uniformity of animal instinct presupposes a corresponding regularity of the physical laws of the universe, insomuch that, if the established laws of the material world were to be essentially disturbed (the instincts of the brutes remaining the same), all their various tribes would inevitably perish.'—Dugald Stewart.

faith—that eyesight and insight of the soul, given to guide the spirit ever in the right way to the full manifestation of all truth; and without this faith, as a praying as well as an exploring power, we dare not gaze out into the infinite azure and say, 'Our Father.' If man feel not, like the Psalmist, when contemplating the starry firmament, that the Maker of all the worlds is the source of the moral law binding upon man's soul, he cannot feel that he belongs to the Almighty, nor desire to be conformed in will and thought to the Lord of his life, his Strength and his Redeemer.*

Such, then, are a few reasons—certainly too feebly presented-for deeming it probable that man was, at his beginning, created perfect in bodily form and mental faculty as man; with a mind for thinking rightly, with correct ideas from outward impressions, with a body ruled by reason, with a will actuated by love, and a spirit to learn truth by knowing God. Believing that almightiness, wisdom, justice, and love are necessarily one, we believe that when man was constituted the sole cultivator of the pleasant and the good, as he still is, he could not but know what to look for and how to use his knowledge. Everything was to him a Divine thought, produced in relation to his own mind, as surely as all the hundred thousand species of lower creatures of this earth find, in their habitat and instincts, a corresponding provision for their enjoyment. His philosophy was not theoretical but practical, inferred from facts and felt as truth, at once intelligent and happy, because

* See Psalm xix.

explaining in everything its meaning by its use. reading the significance of things, he read also the law of his own conduct as to the employment of means ever ready at his hand for human purposes; for then, as now, man worked with the power of God, with agencies provided for his use, in keeping with the reason and the need conferred. He knew what he wanted, and as his requirements enlarged, his power extended, for his prerogative was Godlike, an energy of wisdom increasing the useful while cultivating the beautiful. With love of knowledge, he had no presumption; with love of power, no arrogance; with love of approval, yet no pride; with feeling of sublimity, still no fear; with sense of beauty, no voluptuousness; with love of esteem, no selfishness. If in ignorance he wondered, he patiently waited for more knowledge. Possessed of pure reason and free will, he spontaneously knew nothing of desire unsatisfied. All his faculties worked in faith on the Almighty. Conscious of entire dependence, humility was the basis of his hope and love the fulfilment of his being; all his mental faculties were suitably engaged, and all his affections found their appropriate objects presented by the Hand that fashioned his heart with a living energy, to grow in love and joy as his intellect advanced in light and knowledge.

The condition of man as the created offspring of God, as a being endowed with a spirit to recognise the paternity of Heaven, implied a claim upon the faithfulness of the Creator to provide man with an inheritance equal to his capacity to know, and to represent in will

and action whatever is possible for man to learn of the Divine perfection. The very existence of man as rational, declared that he was made for truth, that is, made to receive the revelation of the Being whom to know is life eternal; the Being who as Life breathes the vital spirit into man's body and soul; who as Love replenishes humanity for ever with His own immeasurable fulness; who as Light imparts to the human will an illuminating faith to pierce through all opposing powers of darkness, and to convert the elements of gloom and horror into those of loveliness and glory.

As to all the physical worlds darkness is as essential as their daylight, so to all the intelligent spirits that inhabit them there is a necessity of some outward darkness into which they may look and see new light arising in its depths:

Darkness shows us worlds of light We cannot see by day.

And thus, too, the night side of our humanity brings us visibly into connection with other spiritual worlds, which not only reveal the vastness beyond thought of His dominions who created spirits to know both good and evil, but also demand our confident reliance on the wisdom, love, and power reigning over all, and which in due time will manifest to all intelligences the folly of imagining contradictions in the works of the Almighty. For as the universe in its inconceivable progressions has dropped a world like ours here and there into chaotic darkness, towards which the hosts of heaven look to see new revelations of Divine love and power, when the

word goes forth, 'Let there be light;' so all in the kingdoms and worlds of the spiritual universe, the mysteries that reveal Omnipotence in justice, love, and mercy are ever passing before the eyes of God's emancipated seers, from which they learn more gloriously still that to adore is to partake with the Divinity. One of those spiritual mysteries into which angels may well desire to look is the past, present, and prophesied condition of man. A being endowed with will, made in God's likeness, and conversant with God, perfect in all the possibilities of perfection pertaining to a man fashioned with reason, senses, appetites, and energies, in keeping with this earth, seems, and yet is not, a failure in the hand of his Maker. Whether in the nature of things such a creature as man, of the earth earthy, could possibly endure, unscathed, the testing fire of temptation, acting on a will, which, though free from guile, was yet capable of guilt, is a question with which we dare not meddle; we cannot understand the difference between the appointments and permissions of Omnipotence. This, however, we know, that whatever man has lost and found, he retains imprinted on his inmost mind as if inherited from the first father and mother, a faint image of the perfect man which becomes more and more distinct to the soul's vision in proportion to its religious enlightenment.

Nowhere openly seen, the ideal man is everywhere believed in. To every human being on earth a good—that is, a complete humanity—seems possible. As surely as there is conscience, so surely also is there a

capacity to feel the holy beauty of the law of love binding together God and man, and which law, to be truly realised, must find a man capable of fulfilling it. The law itself being felt as a reality, requires a real man to represent it in himself as a living power, God and man at one. Thus there is a Divine thought in man that utters to his heart, when faithfully it listens, a prophecy of Heaven assuredly hereafter to be fulfilled in all who rightly hope for it. For the Author of that thought and prophecy in man cannot leave man for ever thinking of the possibility of perfection in his own nature, which still lies under the hideous liability to all evil. but will, with the revelation of the Divine character, which begets the awful consciousness of human depravity together with the desire of purity, provide the means by which man shall receive the fulfilment of that desire in the completion of his own being. The Spirit which makes known the infinite love and absolute beauty of God's holiness as manifested in the Divine son of man, regenerates the human will while revealing that love and that holiness. And as the perfect son of man is also the veritable son of God, as son of man one with mankind, and as son of God one with God, so through the Spirit, proceeding both humanly and Divinely from Him to everyone believing in Him, a human and Divine love is begotten, by which the believer feels that his own nature is becoming perfected in proportion as he truly loves his fellow-creatures. This he cannot do, but because he loves Him who is Love, and who is therefore absolutely wise, just, holy,

incapable of forgiving sin but by the expiation which removes it. This becomes the channel of a new nature in God's likeness to all who earnestly desire to be transformed after the image of Him who created man, and who, as man came into the world to redeem and to regenerate us, that we may inherit the fulness of the Father's kingdom. It is only in Him who gave Himself for us and to us that we learn love in the self-sacrificing severity of its pureness.

If we rightly consider all we know of man's spiritual requirements, and all the holy aids that meet our aspirations, what is our conclusion? Let us devote our faculties-few and feeble as they may be-to their rightful service in faith on Him who gave them, and then the body itself will become a temple of that Spirit who will conform it to Himself as an everlasting dwelling, and renew our souls in His own likeness. There is that in the Book received by Christians as revealed, which to the writer's mind completely supersedes all the efforts of reason, with the aid of her ally, imagination, to apprehend and to explain the conditions of man's past, present, and future existence. Direct appeal to authority, assumed to be inspired, has, however, been intentionally avoided, because such an appeal would exclude all other The aim throughout this volume has been argument. to indicate that the earliest ideas recorded concerning the origin and destiny of man are in keeping alike with the demands of common sense and the principles of true philosophy. However inadequately the intention of the writer has been accomplished, if he has succeeded only so far as to suggest reasons why we should trust our Maker, and appeal directly to Himself for the enlightenment and purity we need, this work will not be worthless.

But there is more than we can see, And what we see we leave unsaid.

APPENDIX.

THE NEGRO.

Whatever the place of the negro may be in nature, his displacement in fact has disturbed the conscience of all Christendom. Those who dislike his colour have yet used him for their profit, and completed their injustice by denying his claim to be deemed quite a man, and would decide the question by measuring their brains with his. The result, however, is not so favourable to the self-measurers as they fancied it ought to be. Thus, Tiedemann states, as the sum of his observation, that 'the brain of the negro is, upon the whole, quite as large as that of European and other human races; the weight of the brain, its dimensions, and the capacity of the skull prove this fact.'*

But Blumenbach's, Knox's, and Lawrence's conclusions do not quite accord with those of Tiedemann. Presuming that these anatomists took equal care with him to avoid error, all we can infer from their facts is, that the negro crania and cerebra which they examined were inferior specimens. The same variety of conclusion would arise if several anatomists were to measure a certain number of English skulls and brains taken from different parts of this country. Those of the Yorkshire peasantry, for instance, would considerably exceed in volume those from Dorset and Devon. As in this case we should be justified only in supposing that the cranial capacity of Englishmen differed, so are we to conclude from the

* Philosophical Transactions, 1836.

diversity of statement by the several anatomists named, that some negro brains and skulls are equal in capacity to those of some Europeans, and others not. That the educated classes have larger heads than the uncultivated, is a fact observed by hatters.

M. Carl Vogt* estimates the capacity of the negro skull after Drs. Aitken Meigs and Morton. The method adopted was filling the skull with small shot, and ascertaining the measure in cubic centimètres. Of negroes in general 76 skulls were measured, and the average volume gives the cubic number 1347-66, according to Meigs, and 1361 according to Morton. If we compare these numbers with those numbers representing the average measure of 341 skulls of Americans in general, we find the negroes have the advantage, the Americans being only 1315-17. Negroes born in Africa have, according to Dr. A. Meigs, larger skulls than negroes born in America. It appears, therefore, that the domestic 'institution,' slavery, degrades man even more than mere savageness and the wild licence of ignorance and vice.

Even if, then, with Dr. Hunt, we assume that the researches of Dr. Morton, of America, and those of his successor, Dr. J. Aitken Meigs, are the most satisfactory extant, we obtain a very good place for the negro's cerebral development. Dr. Meigs found that, in this respect, the negro is next best to the European, and takes precedence of the ancient civilised races of America, the present Hindoo, and the Egyptian of all periods. Pruner-Bey says his own experience with the external measurements did not yield essentially different results. It follows, then, that, as respects cranial capacity, the negro is at least quite as well formed for civilisation as the founders of Indian refinement, the builders of Mexico and Yucatan, or even those of Memphis, Thebes, and the Pyramids, to whom the Greeks acknowledged themselves indebted.

^{*} See the table of cranial capacity in various races in Vogt's Lectures on Man, p. 88.

[†] P. 13. On the Negro's Place in Nature.

[‡] Ibid.

Tiedemann, again, did not find the negro's brain to resemble that of the Oran-ûtan more than the European's, except in its greater symmetry; and it remains to be proved, that a brain out of due proportion is better adapted for its functions than one with equal sides; the oddity of form, in fact, being more probably suited to manifest that eccentricity of genius which is allied to madness.

Those who desire to see all that science and ingenuity can accomplish in tracing similarity of design in the structure of brains and skulls, may consult Huxley and Carl Vogt, but all they will learn will merely show that deviations in development are modifications of the general plan on which skulls and brains are constructed. They will see that there are essential differences between the skull and brain of the negro and those of the highest anthropoid ape. And, in fact, neither the negro's brain nor that of any race supposed to be inferior to the negro, such as the Hottentot and the Australian, presents any real approximation to the cerebral formation peculiar to the ape.* And what is true in respect to the brain is also true in respect to every organ, part, and function, for the whole body is normally in keeping with the brain and skull. Much stress has been laid on the situation of the opening through which the spinal cord is united with the brain. It is asserted to be further back in the negro, and thus rather more towards its position in the ape. It is not true if we measure the true base of the skull; it is only apparently so, from the greater projection of the upper jaw in the negro, which has no more to do with the real base of the skull than a long nose has. But the test is in the pose or the position of the cranium upon the vertebral column or backbone. The skull of the negro is balanced on that column as perfectly as the European's. The joint-surfaces are in both precisely in the centre of gravity: this is not the case in any creature but man, because he alone is formed to walk erect, and every part of his framework is constructed accordingly.



^{*} See Mr. W. J. Marshall on the 'Anatomy of Bushman's Brain,' in the Proceedings of the Royal Society, 1863.

Shall we say that the negro is more like an ape because his jaws are somewhat more prominent than the European's in general? Even some Englishmen enjoy almost an equal prominence of jaw, and, but for conventional notions of beauty, it is a great advantage, since they are mostly blessed with sounder and more lasting teeth in consequence. One of the penalties of over-refinement in the choice and preparation of food, together with other conditions of inordinate civilisation, has been to diminish the development of the jaw, and thus to cause the crowding of the teeth, leaving no space for their due growth and allowing particles of food to rest between them, which, together with their pressure on each other, occasions that prevalent curse of Europe, the dolor of decayed teeth. In short, our deficiency of jaw is our defect, if not a proof, of our bodily degradation. Hence the complaint that the very instruments of mastication, so essential to the initial process of converting food into life-blood, so often fail to fulfil their design, or seem intended only to test our patience and promote the profits of the dentist.

The foot of the negro being, in many instances, somewhat longer than the European's, as well as flatter, and having sometimes a more projecting heel, has been described as thus more resembling the foot of the ape. This is an entire fallacy. There is but slight analogy between any human foot and the ape's posterior paw. True, there is the same number of bones in both, and both have five sets of phalanges or rows of bones, but these phalanges in the ape constitute a thumb and four fingers, and not proper toes as in man. The ape cannot stand erect because he cannot bring his back paws flat on the ground; he has no sole to his so-called foot; and, while standing on the ground, rests entirely on the outer sides or edges of his hinder paws. In that position he is quite out of his proper place. He is formed for an arborial life, and the instrument called his foot is, in fact, constructed rather to serve as a hand. That which partially corresponds to the great toe in man is in the ape a powerful thumb, exactly adapted to oppose the four posterior fingers in grasping; and this dissimilarity extends to the muscles as well as the bones.

Now, unless the anatomists can show any essential and special similarity between the bones and muscles proper to the negro's foot and to those of the ape, he has no right to assert that there is any essential and special approximation in the negro's foot to the hind paw of any ape. If the negro's be a more substantial foot than is generally found in a well-fitting boot so much the better for the negro. The negro can stand erect on one foot, but the ape cannot stand erect on both feet. negroes drilled for the war between North and South were as firm on their feet and upright in all respects as the best soldiers on either side in that awful contest. The length and flatness of many a negro's foot are not more remarkable than in many of the peasantry of England and most of the peasants of Russia. Hard work and insufficient nourishment would break down the arch of any human foot in the process of growth, and render it quite as like an ape's as that of any negro's foot we ever saw. But the feet of many negroes are as well arched in the instep as even Lady Hester Stanhope could have desired. What applies to the anatomy of the foot applies equally to There is nothing in the negro's that of the whole body. anatomy like anything essential to that of the ape, from his hairy hide and bear-like teeth to his brutal brain and handy paws. We blush to dwell on an argument so unblushingly advanced to degrade the negro below his human standing. If we turn from the bodily to the psychological peculiarities of the negro, we shall find no essential inferiority to ourselves, either in the moral affections, or in the mental faculties.

There is, however, such a bias in some minds to regard the negro's occasional degradation in intellect and habit as due rather to the inherent natural inferiority of closer relationship to apes than ourselves, that they have endeavoured to represent him as more brutal than even the brutes themselves. They not only insinuate a suspicion, but positively assert, that the negro is scarcely susceptible of physical suffering. It is true, says M. Pruner-Bey,* that 'bad treatment causes the negro,

^{*} Physiological Fragments in Mémoire sur les Nègres, 1861.

the negress, and the child to shed tears abundantly, but physical pain never provokes them.' Oh, M. Pruner-Bey, you are a discoverer—the negro's soul may suffer from a wounding word till a flood of tears gushes forth to relieve the pang, and a cut from the surgeon's knife or the driver's cart-whip may mangle the flesh, but the negro does not feel it! How it happened that this remarkable fact was never known until M. Pruner-Bey revealed it so lately in Egypt is very unaccountable. slave-owners of the New World must have been dull fellows so strangely to overlook this inability in the negro to feel bodily pain, or they would surely have trusted to moral persuasives rather than the whip to drive their slave-gangs to the terrible toil of the cotton and sugar plantations. 'The negro,' says M. Pruner-Bev, 'frequently resists surgical operations' (why, if he did not dread physical pain?), 'but, when he once submits, he fixes his eyes upon the instrument and the hand of the operator without any restlessness or impatience.' Then he is more of a hero, and would make for a good cause a better martyr than many fine gentlemen whom we know. 'The lips, however, change colour, and the sweat runs from him during the operation.' Then he does suffer bodily agony, M. Pruner-Bey? and his moral courage alone enables him to suppress groans and tears. 'A single example will support our view,' adds M. Pruner-Bey. 'A negress underwent the amputation of the right half of the lower jaw with the most astonishing apathy; but no sooner was the diseased part removed, than she commenced singing with a loud and sonorous voice, in spite of our remonstrances, and the wound could not be dressed until she had finished her hymn of grace.' Well done, negress! doubtless it was a part of your savage religion to endure pain without complaint and to sing psalms for deliverance. You exhibited the true might of the human soul, the government and mastery of the body by the will; and you are a soul more loveable than M. Pruner-Bey by many shades of soulcolour.

The psychology of the negro may be determined by historic facts rather than examining brains. There is no question that

even the lowest classes of negroes in Africa possess the same kind of moral affections and mental faculties as the finest Europeans. They are capable of the same emotions and the same thoughts. Deficiency of knowledge and moral training no more constitute them another kind of human beings than the like deficiency among our outcasts of the neglected classes constitute these another species of men. There is much stray blood of our aristocracy among our city Arabs, who are what they are for want of parents with right hearts and habits. Golbery states that 'the negro at home is generally sober, industrious, an excellent and patient workman, not wanting skill; he governs his family with sagacity and dignity.' 'The negro,' says Mungo Park, 'is compassionate by nature.' Colonel Hamilton Smith observes that, 'collectively, the untutored negro mind is confiding and single-hearted, naturally kind and hospitable. We speak not without personal experience. The female sex is affectionate, to absolute devotedness, in the character of mother, child, nurse, and attendant on the sick. As housewives they are charitable to visitants; within doors orderly; and, personally, very clean: they are joyous; in the night time indefatigable dancers equally with the men, who are in general orderly, trustworthy, brave, and unrepining. Both sexes are easily ruled, and appreciate what is good under the guidance of common justice and prudence.'* And yet 'the good qualities given to the negro by the bounty of Nature have served only to make him a slave, trodden down by every remorseless foot.'

As respects the mental capacity of the negro we have the testimony of travellers and of missionaries. Captain Speke, the discoverer of the source of the Nile, recommends, from what he had seen of the ability of negro clergymen, that such clergymen should be employed in the work of civilising Africa.† Captain Speke would have been hanged in Jamaica: he advises that 'the negroes should be taught to

^{*} Natural History of the Human Species, p. 196.

[†] Captain Speke's speech at Taunton.

stand up for themselves!' And that 'negro depôts should be formed along the east and west coasts of Africa, to assist emancipated slaves.' He describes 'the African as a very intelligent creature;' in short, worthy to be heard in asserting his rights.

With great ability, and with equal boldness, Dr. Hunt has set forth his ideas concerning 'the negro's place in nature;' but, strange to say, he assumes that in every instance in which a black man has evinced any high degree of mental capacity there has been an admixture of European blood in him; and yet he asserts that the blood of the negro is so far differently constituted from that of the European, as to present quite other appearances under the microscope. He is assured of this fact by a lady who had devoted much time to this minute and delicate investigation among the slaves! And yet it does happen that European blood will mix with the negro's, to make a race with a high degree of mental capacity.

There is no doubt that the venous blood of the negro is darker than that of the white man. It must be so, for the simple reason that the colouring matter which protects his skin is restored to the blood as fast as it is deposited, by the vital process which maintains a constant change in all the elements of the body. But every degree of darkness of complexion is attended by a like degree of darkness in the blood.

But what is the typical negro in Dr. Hunt's view of the matter? Just the most degraded variety of the man he can find. He rejects the Mandingoes: they have some degree of civilisation; one among them even invented an alphabet, and, in consequence, all the grown people of Bandakoro can read and write.* Of course they are not negroes; pure negroes are found by Dr. Hunt only on the banks of Congo river. Why? Because there he finds the most debased of the race in outward form and mental character. Let us look for the type of an Englishman on the same principle, and we shall find small brain,

^{*} See Latham's Varieties of Man, p. 476.

flat foot, and all the signs of degraded manhood among ourselves; but who will accept that specimen as the type of our race? We all agree that man becomes degraded in form if debased in habit; and if to this be superadded the effects of unhealthy position and deficiency of food, the proper form and faculties of humanity must degenerate to their lowest possible condition. If Dr. Hunt had been disposed to be fair to the negro, and take a good specimen in form and development, as more nearly approaching the true type, he might have found an example in the museum of the Royal College of Surgeons. There is a cast taken from a negro youth, standing in a conspicuous position, which Sir Joshua Reynolds pronounced to be the finest example of the human form he ever saw. And yet Dr. Hunt, choosing rather the most debased specimens he can discover, must grant that even the Congo negro retains human faculties and affections; and is it not the characteristic of such faculties and affections, that, under favourable circumstances, they are susceptible of improvement? If then, in the dark places of the earth, there are men so dreadful to contemplate, it certainly is not our duty to leave them to their darkness, but by all means in our power to bear among them that light which has transformed ourselves. Our land was once under such unfavourable circumstances, that Cæsar deemed Britons too stupid to be made slaves. We see what Christian intelligence and right government have done for us; let us, then, patiently extend what we enjoy. That negroes have improved mentally, morally, and physically, under favourable conditions, we have proofs without going to Africa or America to discover them: the evidence is happily brought home to us, as the following letter will sufficiently indicate:-

Church Missionary Society, 14, Salisbury Square, London: Nov. 28, 1863.

DEAR SIR.

Our common friend Mr. ——, of ——, has requested me to send you our experience of the capacity of the negro race for intellectual culture on the West Coast of Africa.

There are between twenty and thirty negro teachers who correspond with us direct. Their education is of various degrees: they all exhibit an intellectual ability fully equal to that of Englishmen of a similar amount of education, while some of them rank with the ablest of our European missionaries in grasp of mind, vigour of thought, and force of expression.

The printed volumes of the Journals of the Rev. Samuel Crowther will fully bear out this statement.

The late Bishop of London, Dr. Blomfield, examined several negroes for holy orders, and he frequently mentioned to me that one of them had furnished him with as striking a paper on the evidences of the Christian religion as he had received in a very long course of examinations for holy orders.

I was myself a tutor for several years in Queen's College, Cambridge, and have lectured many hundred English students in classics and mathematics. I have since had several negroes resident with me from time to time, and have instructed some of them in mathematics, and have read the Greek Testament with others. I have never been able to detect any inferiority of natural ability in my negro pupils.

I trust this statement will sufficiently meet the enquiry of Mr. -----.

Believe me, dear Sir, Very faithfully yours,

HENRY VENN,

Hon. Sec. C. M. S.,

Late Fellow and Tutor of Queen's College, Cambridge.

The Rev. S. Crowther, now an African bishop, was taken from a slave-ship and educated. That he is a true negro was affirmed by the testimony of Mr. Tristrem, at the meeting of the British Scientific Association at Newcastle, 1863. Mr. Hanson, who read a very intelligent and interesting paper at the Association Meeting at Swansea, in 1848, was also a negro. But Dr. Hunt treats the testimony of missionaries with contempt, as partial and prejudiced. Does Dr. Hunt know more of negroes than men who have lived among them? Missionaries have always been the pioneers of civilisation and advancement; and Captain Speke says, 'I maintain the

missionaries Rebmann and Erhardt, by exciting the minds of the London geographers with their notices of a huge lake in the interior of Africa, caused the expedition to be formed which led to the discovery of the Victoria N'yanza.'

If the negro's brain be indeed so deficient in form and capacity as some assume, this testimony would tend to prove that the negro brain was really of a higher quality, in proportion to quantity, than the European. Dr. Hunt allows that even his choice negro manifests a good memory, and has fine imitative faculties. So far from such a union proving the absence of mental power, we might more reasonably infer that good memory and high imitative faculties would in their co-operation, under the influence of good example, demonstrate the truth of Hesiod's fine old saying, 'Memory is the mother of all the Muses.'

The capacity of the negro to compete with whites in the same field is proved by facts. Thus, not to point to more recent American history, when Washington indicated the troops most worthy of special honour in the revolutionary war, he placed a negro regiment in the first rank; and General Jackson, at the close of the war with England, says, in his proclamation addressed to the negroes, 'You, like ourselves, had to defend all that was dear to man. But you surpassed my hopes. I have found in you, united to other excellent qualities, that noble enthusiasm which impels to great deeds.' Whenever they have been placed in a position to exert their energies for themselves; whenever they have obtained the advantages of education, negroes have evinced a capacity and reached an elevation of character which of course could never have been manifested while under the thraldom of their taskmasters, whose interest it was to use them as beasts. For many years the children of free negroes have been admitted on equal terms with those of whites in the schools of Boston, and the managers and teachers have found no difficulty in treating them alike. Negro students have shown no deficiency of brain

^{*} Letter to Athenaum, Jan. 22, 1864.

in the colleges of New England; and the free coloured people have not only wealth among them, acquired by talent and industry, but their physicians, clergymen, schoolmasters, engineers, and men of business, lose nothing by comparison with the most cultivated people in the world. Nor is the female sex behind the male; many coloured ladies excel as teachers, governesses, and artists; a negress now vies at Rome with other artists; and her skill, as a sculptor, is attracting much attention. And the nobleness of this class of people has expressed itself in a higher manner still, by their avowed determination to abide by the slaves till the controversy between the oppressors and the oppressed shall be settled for ever. *

In short, the depressed race now freed has made a better beginning than could have been hoped for, in asserting their ability to maintain a good independent social position. Their own high qualities of mind and conscience are working with events in such a manner as must speedily release them from the contempt of ignorant prejudice, and oblige even ostensible anthropologists of the most disputatious temper to acknowledge that negroes can take as manlike a place in nature as any of themselves.

As the Report of the Commission on the revolt in Jamaica is not yet published, we cannot refer to it in evidence of anything asserted concerning the negro population of that island; but it is certainly known, that the French revolution was attended by more refined cruelties than the Jamaica 'rebellion,' and we fear that even British soldiers and sailors were in their rage so forgetful of their honour as to commit excesses which may be classed with barbarities.

It is as difficult to account for the negro as for any variety of man on the earth. So unready are many 'Pale-faces' (as the Red Indians call their white neighbours) to look beyond surface appearances, that, to avoid supposing themselves derived from the same original stock, they endeavour to show that the negro is no more of a man, like themselves, than a common

^{*} See article on 'Negroes in America,' Edinburgh Review, Jan. 1864.

ass is of a zebra. We have not heard, however, that the zebra naturally breeds with the common ass; if he did, we should probably have a more spirited race of donkeys, and it is a pity we have not. But there is no doubt that Saxons in America very naturally beget children by negro women, and sometimes even treat their offspring as their own flesh and blood. It is truly hard on the negro to be regarded as an inferior species by the very philosophers who deem themselves derived from monkeys, since if in any anatomical respect the negro has any point of greater resemblance to the quadrumanous ancestry that only proves the negro is nearer the primitive type from which the Saxon species has further departed by admixture. And if the Saxon has gained by admixture, it must be by a cross with some species of man higher in the scale of humanity than the Saxon—where, then, is that? But to complete the argument we are in want of facts, since there is no case on record in which different species have continued to breed together. What, then, becomes of the notion that the negro is a different species of man from ourselves? And if he is not a different species, why conclude with Mr. Crawford and Carl Vogt that he is from a different typical stock of ape? If such reasoners mean to prove anything by their arguments, they mean that the Creator was bound, so to say, in accommodation to their ignorance, to form one kind of man expressly to suit the climate of Central Africa, and another kind in adaptation to that of northern Europe. If their theories were true, Mr. Crawford and Dr. Hunter would certainly be able to point to some impassable boundary between white and black men. In default of intelligence concerning the existence of lines of demarcation between the different so-called types of mankind, it was universally believed, until the new preposterous philosophy was invented, that the extremes are united by intervening gradations and varieties that blend together in every shade. It is rather strange that if men were created in different types for the purpose of occupying separate regions, that negroes should multiply in Canada, and Saxons at the Cape of Good Hope. Is not the fact that the Mongolian on the table-lands of the North is the palest variety of man, while the Negro in the burning plains of Africa is the darkest, an approximation to a proof that the Creator has formed man with a constitutional power of accommodation to outward condition, and superadded also time and gradual distribution as elements of that accommodation? It will scarcely be denied that some power of accommodation does exist in man's constitution by which he is enabled to become by degrees acclimatised in any land. If, then, there be this power, for what is it given but that man should be gradually adapted to any habitable clime? And if so, where is the need of imagining the creation of separate types or typical races for different centres? Creation is not productive of opposite operations for the attainment of the same end.

Natives of the north, going suddenly to the black man's domain, are indeed smitten down with fever: but this only shows that black men are better prepared for their climate than white men. and that white men should consider why and how. The noble crews and commanders of the 'Wilberforce' and the 'Albert' fell faster before the aerial defender of the negro than ever happened to the slaver. How was this? A ship royally commissioned and royally equipped to bear blessings to the oppressed is visited by pestilence as she proudly walks the waters, hurrying to enter into the very heart of the land to show the might of mercy in her mission. As she penetrates the river she stirs the slumbering elements of destruction, but not until above 200 miles up the Niger, at Iddah, did the river fever seize upon the devoted sailors. Out of 160 men engaged in the government expedition of 1841-42 only 15 escaped; and in the expedition of Laird and Oldfield on the same river in 1853, out of 40 Europeans engaged, but nine returned.* None of the blacks employed on those occasions suffered from the malaria. and the country was populous with healthy negroes.

The black man has, therefore, something in his constitution which protects him from the influence of those deadly and

^{*} Hutchinson's Western Africa, p. 215.

invisible agencies produced, it would appear, by the rapid decay of vegetation in the large rivers of his country. Is that a proof that a negro is another species of man? No, it only proves that the laws of heaven change not in mercy to wilfulness and ignorance, however royal and benevolent. The law of accommodation to climate is a law acting chronically; it possibly requires a long time to make a black man. And as he would be more liable to consumption, and lung-disease of more acute kind, than an European if suddenly transported to the north, so Europeans suddenly transported 200 miles up the Niger, died of fever where the black man was at home, being fully adapted by his constitution there to enjoy himself.

That the negro is not an abrupt production, marked off by his peculiarities from all neighbouring races, we might infer from the general fact that there is a greater tendency to darkness of skin as we approach the tropics; this tendency being also most evident where habit or necessity causes the exposure of the body to the direct influence of the sun in bad air.

Thus we have the red-brown Egyptian Falla blending with the swarthy Copt, and both running into the modified negro, as mixed with the Arab in Nubia, and more strongly marked among the Berbers. The negro of the middle Nile is thus continuous with the semitic type in the Arab, but lost again in the northern Kaffre, only to reappear by degrees in the intensity of his characteristics in the burning plains of Central Africa.*

In short, as Dr. Latham well observes, 'the departure from the true negro type throughout Africa is always in high land or table-land.' †

A slight local difference where the general climate is the same often exerts a considerable influence on the complexion and even the features of the human face. Perhaps this is nowhere more marked than at Gaza, 15 miles from Ascalon, on the coast of Palestine. 'It is separated from the sea by a flat shore about a mile in breadth, and the plain, the date trees, and

^{*} See Latham's Varieties of Man, p. 471, &c.

[†] Ibid., p. 482.

the naked smooth appearance of which remind one of the landscapes of Egypt; in a word, here the soil and climate entirely
lose their Arab character. The heat, the breeze, and the dews are
the same as on the banks of the Nile; and the inhabitants have
more the complexion, the stature, the manners and the accent
of the Egyptians than the Syrians.'* 'The Arabs of the
valley of the Jordan have flatter features, darker skins, and
coarser hair than the other tribes,' as Buckingham observes.
He mentions a family as having negro features where there
was no negro admixture, but only unmixed Arab blood. Dr.
Thomson states that the negro complexion becomes softened
into the bronze of the genuine Arab and the negro features
obliterated after long residence in certain parts of Palestine.†

M. O. B. Du Chaillu is not alone in his testimony that 'the negroes who inhabit a damp moist country, especially if mountainous, are less black, though possessing all the negro features. than those belonging to the open country with a dry atmosphere. The equatorial negroes are not so dark as those near the great desert of the Senegal country. Amongst the Apingi, living in forests, many persons are almost mulattoes.' The Rev. A. Bucknall, a missionary in that region, corroborates the statements of M. Du Chaillu on this subject. § Dr. Livingstone also confirms its truth by his own experience in Africa. And, moreover, he says that the exposed parts of his own skin became so black that he was taken by the natives to be a black man until he showed them the parts that were covered. and told them that if they kept themselves clean and protected their bodies from the sun they would become comparatively fair. In fact, the blackness of the negro is an accident of climate prolonged in its effect in his case from constitutional conditions which favour its propagation in his offspring. A black complexion, however, is not necessarily adherent to the negro, or rather it is a fact that negroes have

^{*} Quoted from Volney in Journ. Soc. Lit., 1863, p. 365.

[†] The Land and the Book, chap. xxv.

^{\$} See notice of paper read at Manchester, Sept. 1861, in Athenaum.

See Good Words, Nov. 1861.

lost their blackness, together with the crispness of the hair, and even the more marked peculiarities when removed to a Instances of this kind are related by northern climate. Pritchard, in his Natural History of Man, also in the Philosophical Transactions, vol. lvii., and in most works on human physiology. There is an interesting paper on the subject, by Dr. Dunne, in the Ethnological Transactions, vol. i. Smith * observes that 'the field slaves are slow in changing the aspect and figure of Africa; they preserve in a great degree the African lips, nose, and hair. The domestic servants acquire agreeable and regular features, and the expressive countenance of civilised society.' Their hair grows straight, and six or eight inches long. This testimony is confirmed by travellers.† Dr. Elliotson, in his work on Human Physiology, I relates several instances of blacks having become light, and of white persons becoming partially or wholly black. Cases of the latter change have been frequently related during the last ten years. Thus, Dr. E. D. Dickson, writing from Constantinople, states that he had seen an Armenian named Ovannes, aged 28, who after intermittent fever gradually became nearly black as the disease passed away. 'The cicatrix of a blister became intensely black and shining as it would have done in a negro.' The lips, the palms of the hands, and the soles of the feet were light, as they are in the negro; spots of a dark colour appeared on the palate as found also in the negro. Here, then, we have spontaneous deposit of the black pigment in the rete mucosum of a comparatively fair man. § It will be said disease produced the change. Yes; and the case is the more instructive on that account, for the malarious fever passed off as the blackness came on. This fact points to the connection

^{*} On the Causes of the Variety in the Complexion and Figure of the Human Species, p. 85, et seq.

[†] As by Dr. Hancock, the American traveller, quoted in *Intermarriage*, by Mr. Walker, p. 279.

[‡] P. 1108, et seq.

[§] This case will be found in the Medical Times, Nov. 28, 1863.

between the causes of malarious fever and the occurrence of the blackness, and at once reminds us that the negro acquires his colour in the midst of malarious influences, and is protected from these influences by his colour. His blackness is, in fact, an accommodating process by which he is enabled to endure a climate with impunity that would destroy a white man. We should, however, remember that African infants are not born black and do not acquire blackness for a year or more after birth. Often, too, a perfectly white adult African is seen, the black deposit being totally absent from birth. The blackness is not, then, an essential characteristic of the negro, and is no indication of his derivation from a black-faced ape, nor of his being a different species of man from ourselves.

How, then, is a negro produced? We answer in a word, by climate. A little patience will be required in adducing the proof. Where is the African negro found? Except when migrating, only in the marshy land between the high land and the sea, from Senegal to Benguela, and in similar circumstances on the eastern coast. Also about Lake Tchad, in Sennaar, and along the marshy banks of rivers, and low isolated spots of marshy character where malaria exists. He is not found in the highlands nor in dry open country. The type rises as the country rises, but there is no line of demarcation. The most debased negroes are in the most unhealthy regions, as the Delta of the Niger, and about the Congo river. But 'the debasement of the negro is, on the whole, more physical than mental.'*

It is said that the typical negro is represented on certain monuments of Egypt as early as the 20th dynasty, or 1300 B.C.; and therefore it has been hastily inferred that the Mosaic chronology is not long enough to account for the production of a negro under climatic influences. But who knows how long a period is required for the purpose? Mr. Winwood Reade who looked into this matter in the right place and manner, in his spirited work on Savage Africa, p. 524,

^{*} Winwood Reade.

makes the following statement: 'That the red races change into black, when they descend into the lowlands, cannot be easily disputed. I was told by the Senegal residents that some years ago it was rarely that one saw a black Fula or Puelh. It is now impossible to find a red one without travelling into the interior [highlands]. With the Mandingos it is much the same. These two tribes driving out the negroes, the result is they are becoming negroes themselves.' So, then, it does not require many ages to convert a red man, like an Egyptian, into a black man, with all the characteristics of the negro. Livingstone confirms this statement, thus: 'As we go westward, we observe the light colour predominating over the dark; and then, again, when we come within the influence of damp from the sea air, we see the shade deepen into the general blackness of the coast population.'* Daniel says that between the Gaboon and Cape Lopez, the degraded bush tribes become typical negroes, and also on the banks of the Mimi, Bopuka, and Gaboon rivers. 'In higher, healthier localities the same tribes are of lighter complexion, less prognathous development, and greater intelligence of face.' In short, geologic formation in respect to soil, as well as the elevation of the land and its productions, influences the general condition of the human body in Africa, as in other countries; and that the degree of temperature is not the sole cause of variety in complexion is well-known. 'On leaving the low swamps for the sandstone hills, the skin becomes fairer; black becomes brown; and brown yellow.'t The diversities observable among men of the same race in Africa is also seen among the aboriginal Americans. colour of skin they vary considerably, according to elevation and climate, individual constitution, and other causes.'t Dr. Morton states that they are of 'all tints from a decided white to an unequivocally black skin.'

Thus we find that colour of skin depends on influences

* Travels in South Africa. † Dr. Daniel. ‡ Archibald Smith, M.D. altogether independent of race, a fact we might have inferred from the variations among animals known to be of the same stock, variations vastly greater than any evinced amongst mankind. That animals palpably degenerate in the lowlands of Western Africa is an additional argument towards proving the degradation of man in the same region, from the same influences. *

Mr. Reade's summary of his views on this subject is too much to the point to be excluded here. He says: 'I have always been anxious to impress upon men of science this fact, that the woolly-headed, black-skinned, fetid, prognathous negro is by no means to be regarded as the typical African. That he inhabits regions that are in themselves large, but which, compared with the area of this immense continent are comparatively small; and that the real African is copper-coloured, and superior in every respect to the negro, mentally and physically. I went further than this, and asserted it as my belief that the negro inhabits only maritime districts, or the marshy regions of the interior; that he originally belonged to the copper-coloured race, and that his degeneration of type is due entirely to the influence of climate and food.' †

The testimony of facts, then, does not prove that the negro is inherently and specifically a creature different in derivation and formation from a white man, but that all his constitutional peculiarities are due to causes which may modify any variety of man. He is but a striking instance of the power of man's nature to accommodate itself to circumstances. If we do not like his features and complexion in contact and contrast with ourselves, we may at least hope that the civilisation into which he has been forced will accommodate him patiently until his nature can accommodate itself to civilisation as completely as it has done to the degrading influences to which he has been so ruthlessly exposed. Let all who find him objectionable do their best to promote his happiness, as, if Christians, they would do with their worse neighbour, and he will be transformed to

^{*} Reade

[†] Mr. Winwood Reade, F.A.S.L., F.R.G.S., in Anthropological Review, Nov. 1864, p. 341.

the liking of all reasonable people faster than they may expect. Moral beauty can glorify any face, and, from what we abundantly witness, misery distorts and darkens features once looked upon with gladness. A happy condition of mind is beautiful, and conduces to the development of bodily beauty as the normal outgrowth of the happy soul. We know that vice and wretchedness deface all traces of the divine character in the human form, but that a happy faith, working by love, under favourable circumstances, will mould the features everywhere into beauty. It is intelligence full of good hopes that brings the mould, and bloom, and brightness of heaven down to earth. There is a beauty proper to holiness which is not merely metaphorical, and we can scarcely imagine a holy family repulsive to look upon. The women whom Dr. Wolff met in Cashmere, when escaping from their oppressors, said to him, 'Formerly the maidens in Cashmere were as beautiful as the sun, and white like milk, but tyranny has made us black and ugly.' Sir Andrew Smith informed Mr. Reade that the skin becomes black in the Hottentot when he is subjected to hardship and hunger. And it is a fact that the enslaved, who labour without true joy, express the wretchedness of their condition in their features, and leave an aggravated impress of their misery in the complexion and features of their offspring.

A peculiar effluvium is said to be a strong occasion of repugnance to the dainty citizens of the new world. That such a cause of offence may be incident to the black skin as one of the conditions that render that skin a kindly accommodation to a hot climate, and a protective against the influence of malaria, is highly probable. But such an offensive exhalation is not peculiar to negroes; even Europeans acquire it by long residence in the torrid zone, for this, among other effects, is thus stated by one who witnessed them. The climate of central Africa upon residents from more northern regions induces lassitude and indolence, and the regular warmth causes baldness, and thins the beard, thus assimulating strangers in body as in mind to the aborigines. They are unanimous in quoting a curious effect of climate, which they attribute to

a corruption of 'the humours and juices of the body.' Men who, after a lengthened sojourn in those regions, return to Oman, throw away the surplus provisions brought from the African coast, burn their clothes and bedding, and for the first two or three months eschew society; a peculiar effluvium rendering them, it is said, offensive to the finer olfactories of their compatriots.'*

Whatever we may think of the philosophy that accounts for the effluvium by attributing it to corruption, it is evidently something produced by the climate, which better enables those exposed to it to resist its influence; and, therefore, we can well understand how those who have acquired the dark skin from forefathers exposed for ages to a climate productive of such accommodating peculiarities, should, with the dark skin. also permanently retain the effluvium that may operate as a 'protective atmosphere against malarious influences.' This effluvium seems, however, to be the occasion of considerable exaggeration. Perhaps some who have suffered from it would 'die of a rose, in aromatic pain,' if sniffed with a prejudice. Mr. W. Winwood Reade says, 'I have repeatedly sat among crowds of negroes in small, ill-ventilated rooms, and have detected no smell more disagreeable than the oil with which they anoint themselves. †

Disgust as often imagines what it does not perceive as charity overlooks things offensive by seeing things above them.

The woolly hair is generally associated with the negro skin, not always. It is, however, real hair, and not at all wool, but affording, by its tendency to form a close, curling, dense, natural helmet, another beautiful evidence of accommodating power in the human constitution, as by this means the negro's head is well defended from the intense heat of the sun. Some negroes are said, by observers who have endeavoured to find in them indications of a distinct species of man, to have hair growing in tufts, like wool on sheep, but this is proved to be a

^{*} Captain Burton on The Regions of Central Africa, vol. ii., p. 14.

[†] Savage Africa.

mistake, the tuft-like appearance being the result of art and not of natural growth.

We have reason to linger with the ethnical philosophers over the negro, for in him we find an extreme deviation from our typical man. He has the same number of bones and muscles, nerves and nutrients, but he has the oddest surface modifications of man we know of, and therefore we do not feel quite at ease with him: our prejudices associate something ominous with blackness; our devil is black, while the negro's is white. We do not suppose that any English Desdemona would prefer a thorough nigritic Othello. Why? Probably because a black skin and a black wig, as thick and curly as a judge's, rather hide the man. Does he blush? Perhaps not visibly, but a black lady, akin to him, would feel that he does at times, though, like herself, behind a sable mask. fancy ourselves like him at heart, we can sympathise with him. And after all he is but a man as good as oneself, with the additional advantage of being better able to bear a hot climate. What is peculiar to him only proves the physiological aptitude of the human body to acquire fitness for the enjoyment of life in those tropical localities in which, by the slow extension of families, he and his kindred have been born and bred. What predispositions or idiosyncrasies prepared his forefathers safely to enter the African swamps, and what time was expended in acquiring his outside peculiarities, we know not: but judging from analogy, the testimony of intelligent travellers, and the darkness of some Saxons after a few years in 'Afric's burning clime,' we should say, not many The best of the white man is there in the black man; but protected by wondrous addenda—a black shield and a helmet better than of felt being placed on him, in fact, by the hand of God. He is not a paulo-post ape, but, at most, a man much cared for by his Maker, a man too often, however, badly treated and worse trained by men called Christians. There are some men among his masters with more of the everlasting nigritia in the colour and crown of their souls, perhaps.

The negro is a valuable commodity to those who know how

to use him and make money of his blood and muscles. There is plenty of work in him. He is, when in health and moderately encouraged, more contented, cheerful, and loving, than those who trade in his good qualities. He is the most vivaciously constituted man in the world; he is in sympathy with sunshine; hence he resists tropical influences that would prove fatal to white men, who cannot bear so much light, and therefore have not so much life and liveliness in them. dark pigment that underlies his skin takes the hurtful, feverforming, decomposing actinic rays out of the sunbeams, and with them forms an atmosphere that surrounds him with a finer preservative against malarious fevers than any thieves' vinegar, chloruret, or Condy's ozonised fluid. He transpires ozone with a life in it. This sometimes disgusts the olfactories of those who buy and sell the article as they would guano, for the sake of the crops it enables them to raise on the dismal swamps of South America.

The negro race increases the fecundity of any race with which it mingles,* and is really a great check upon the destructive influence of climate on the European offshoots planted in Southern America. These easily endure the admixture of African blood with their own, for the sake of what they can make of it. In fact, negro blood sustains the life of Saxons, Spaniards, Portuguese, and Mongrels, who would otherwise perish in the regions indicated. The blacks not only produce the food of such people, but improve their blood for the climate, and hence the outcast negroes and their mixed descendants are strongly taking root in the regions of Guiana, where pure or partial whites would speedily die out, if there were not also a tolerably pure negro blood occasionally adding a little more life-force to theirs in their offspring. Under the auspices of British freedom, negroes are rising in the moral scale; and though the banner of the States is still in tatters, and the stars are not all benignant, and the equal stripes flirt out much falsehood in the face of heaven, yet the

^{*} See an article on the negro in the Anthropological Review, Jan. 1866.

terrible war between the North and South, while the fit punishment and fiery purification of pretentious spirits is working out its moral purpose rather for the sake of the oppressed than the oppressors. The land was proud, too proud, to be otherwise humbled. The prejudice of race has stopped the progress of the nation until God's controversy with it shall be settled, and till then the other nations must stand by and wait and wonder. The burning fact that laws were enacted and approved by all the States, which laws were intended to crush the souls and bodies of the negroes, out of whose toil the wealth of many states was wrung, was a fact sufficiently outrageous against the rights of humanity to call to Heaven for interference. But the Divine Hand comes not visibly forth from the cloud to prove its guiding presence; its power is manifested in overruling the elements of evil in their working. In the thunder, the lightning, the tempest, and the earthquake there is mercy; but that mercy speaks with the trumpet voice of judgment, causing coward consciences to quake and feel there is no freedom for the man that talks of believing God surremely, without loving his neighbour as There is a law in nature that by violence improves the world, if men but take advantages of its teaching. a pious fraud, a fine consummate hypocrisy that, to transport free men to an African Liberia, and to continue breeding. buying, selling slaves at home, and crushing out their blood to fatten the soil of a nominally free country! And what a blessed thought of peace that was in a President's politic heart and lips which said, 'Negroes, be men, good patient men, and take contentedly the grade a wise Providence appoints for you! Being an inferior race, why try for a place among your betters? submit, and as slaves improve your masters since you cannot improve yourselves.'

Here is a physiological recipe for making a slave: Take a black child, or a white; as soon as he can run alone, and whisper Daddy, tell him he is your property, and make him feel it. Let him also feel that his mother is yours, as much as your cows and calves. Let him feel, moreover, that his

father is your slave, and that all his kindred are your chattels. Train him not to fear God but to fear you. If he shows any will of his own, 'thrash the devil out of him.' Suffer him not to read, think, or pray; train him as a beast, and work him as he grows; let his work grow with his growth, and strengthen with his strength. Feed him, and clothe him, and let him sleep only for you. In his maturity you will find a man of your own making, a modified idiot with just sense enough to laugh, and scarcely to know what you mean when you assure him he has no human rights, because he belongs to a race marked by Providence, with the stamp of inferiority, and, if with a soul, only capable of reaching heaven by obeying the order of your superior nature. Yes, thus to manipulate your handiwork is to lav an embargo and restraint, an overpowering, irresistible weight, upon the soul of man, from which he cannot rise against you—till the day of judgment. You have suppressed the human faculties, and finding a human being in that state, you may, if you please, say such a kind of man is not fit to take care of himself, and therefore you take care of him as you would a tamed beast of burthen broken in to work for you.

This deliberate abuse of power is so characteristic of fallen human nature that it is universal. Man, in fact, is so terrible to man, that no man trusts another until he knows, or believes he knows, that other to be living under the influence of some moral conviction, some sense of law and of God, which binds him to restrain his selfishness, and to regard his fellow-man as equally precious with himself in the sight of that Being to whom both are responsible. This necessity of Divine law for the safety of human society in all parts of the world, is a proof of the unity of human nature, as well as a proof of man's superiority to animals which cannot recognise law, having no conscience. That man resists his conscience, or the faculty within him which consents to the righteousness of the law which everywhere says, Do as you would be done by, demonstrates two things: first, that man's proper normal state is that of righteousness; and, secondly, that he has fallen from

that state and needs other restraints than those of his own conscience. In short, man, without the kingdom of God in him, is not now to be trusted with power over his fellow-man, and society feeling this, human laws, founded on Divine law, are in all civilised communities enacted for the protection of man against the wilfulness and power of man. Now, where slavery exists, whether legalised or not, it needs but little logic to show that both the Divine law of conscience, and the human law that protects man from the power of man, must be so far in abeyance, and therefore it follows that where slavery or its spirit exists civilisation, whatever may seem, must itself be at a low ebb, either scarcely beginning or nearly gone.

The idea of being made the property of another is abhorrent to every man. It is true, indeed, that in certain states of society, the righteousness, properly represented by a debtor and creditor account, made it expedient that a debtor who could not pay what was due to another must be either freely forgiven the debt, and made free from debt and all obligation, or, if the creditor determined to demand justice rather than render mercy, the debtor must become bound to do the creditor service until the debt be paid by labour. That sort of righteousness was protective to society; a debtor might always be expected to do his best to pay what he rightly owed, because every man is bound to be just or to suffer for his injustice. An unavoidable debt which cannot be paid claims to be fully and freely remitted. But we never heard that negroes were claimed by their masters as debtors to them. Negroes were first stolen and then sold to the receivers of the stolen goods; the receivers being, of course, as bad as the thieves. A man robbed of his liberty is robbed of his all, and the only restitution possible in that case is liberty, and a free gift of whatever loss of property or privilege the loss of liberty may have caused. Slaves, moreover, cannot be rightfully inherited, because what cannot be rightfully owned by one man cannot be given by him to another. In short, the general conscience of humanity indignantly exclaims against the oppression of

the weak by those who have the power, which the common consciousness declares can be exercised rightly only in protecting weakness from being wronged. This common indignation against oppression, when exhibited in its naked enormity, is evidence of the common conscience of mankind, and therefore of the unity of man; and therefore, too, those who, for selfish purposes, resist the voice within them that cries out We will not be slaves, condemn themselves if they hold other men in bondage. They place themselves out of union with the brotherhood of mankind, and prove it when they say the slaves whom their oppression has degraded are chattels and not men, while yet it is the human power to work that makes them marketable.

Europe rose against the Algerines who found Europeans more profitable slaves than negroes; and the awakened world will yet rise against slavery in any form, for commerce, science, and revelation alike declare the right of our common nature to be free to labour for ourselves and one another. No man can truly and completely be a slave but by the surrender of his own will to tyranny, and if we are, by the corruption of our moral nature, voluntarily subject to the master-spirit ruling in our lusts, we can be liberated from that spirit only by a power that imparts a better, because a God-like, will. The true liberty of manhood is rightly called redemption, as purchased for us, and then salvation, because secured to us by the gift of that Spirit which conforms our nature unto perfect health and safety, in willing obedience to the law which says 'Love God supremely and your neighbour as yourself.'

6 0066

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NEW-STREET SQUARE

GENERAL LIST OF WORKS

PUBLISHED BY

MESSRS. LONGMANS, GREEN, AND CO.

PATERNOSTER ROW, LONDON.

-analpere-

Historical Works.

- LORD MACAULAY'S WORKS. Complete and Uniform Library Edition. Edited by his Sister, Lady TREVELYAN. 8 vols. 8vo. with Portrait, price £5 5s. cloth, or £8 8s. bound in tree-calf by Rivière.
- The HISTORY of ENGLAND from the Fall of Wolsey to the Death of Elizabeth. By James Anthony Froude, M.A. late Fellow of Exeter College, Oxford.
 - Vols. I. to IV. the Reign of Henry VIII. Third Edition, 54s.
 - Vols. V. and VI. the Reigns of Edward VI. and Mary. Second Edition, 28s. Vols. VII. and VIII. the Reign of Elizabeth, Vols. I. and II. Third Edition, 28s.
- The HISTORY of ENGLAND from the Accession of James II. By Lord MACAULAY.
 - LIBRARY EDITION, 5 vols. 8vo. 24.
 - CABINET EDITION, 8 vols. post 8vo. 48s.
 - PEOPLE'S EDITION, 4 vols. crown 8vo. 16s.
- REVOLUTIONS in ENGLISH HISTORY. By ROBERT VAUGHAN, D.D. 3 vols. 8vo. 45s.
 - Vol. I. Revolutions of Race, Second Edition, revised, 15s.
 - Vol. II. Revolutions in Religion, 15s.
 - Vol. III. Revolutions in Government, 15s.
- An ESSAY on the HISTORY of the ENGLISH GOVERNMENT and Constitution, from the Reign of Henry VII. to the Present Time. By JOHN EARL RUSSELL. Third Edition, revised. Crown 8vo. 6s.
- The HISTORY of ENGLAND during the Reign of George the Third. By the Right Hon. W. N. MASSEY. Cabinet Edition. 4 vols. post 8vo. 24s.
- The CONSTITUTIONAL HISTORY of ENGLAND, since the Accession of George III. 1760—1860. By Thomas Erskine May, C.B. Second Edition. 2 vols. 8vo. 33s.

Digitized by Google

- CONSTITUTIONAL HISTORY of the BRITISH EMPIRE from the Accession of Charles I. to the Restoration. By G. Brodie, Esq. Historiographer-Royal of Scotland. Second Edition. 3 vols. 8vo. 36s.
- HISTORICAL STUDIES. I. On Some of the Precursors of the French Revolution; II. Studies from the History of the Seventeenth Century; III. Leisure Hours of a Tourist. [By HERMAN MERIVALE, M.A. 8vo. price 12s. 6d.
- LECTURES on the HISTORY of ENGLAND. By WILLIAM LONG-MAN. Vol. I. from the earliest times to the Death of King Edward II. with 6 Maps, a coloured Plate, and 53 Woodcuts. 8vo. 15s.
- HISTORY of CIVILISATION. By HENRY THOMAS BUCKLE. 2 vols. 8vo. £1 17s.
 - Vol. I. England and France, Fourth Edition, 21s. Vol. II. Spain and Scotland, Second Edition, 16s.
- DEMOCRACY in AMERICA. By ALEXIS DE TOCQUEVILLE. Translated by HENEY REEVE, with an Introductory Notice by the Translator. 2 vols. 8vo. 21s.
- The SPANISH CONQUEST in AMERICA, and its Relation to the History of Slavery and to the Government of Colonies. By ARTHUR HRLPS. 4 vols. 8vo. £3. Vols. I. and II. 28s. Vols. III. and IV. 16s. each.
- HISTORY of the REFORMATION in EUROPE in the Time of Calvin. By J. H. MERLE D'AUBIGNÉ, D.D. Vols. I. and II. 8vo. 28s. and Vol. III. 12s. Vol. IV. nearly ready.
- LIBRARY HISTORY of FRANCE, in 5 vols. 8vo. By EYRE EVANS CROWE. Vol. I. 14s. Vol. II. 15s. Vol. III. 18s. Vol. IV. nearly ready.
- LECTURES on the HISTORY of FRANCE. By the late Sir James STEPHEN, LL.D. 2 vols. 8vo. 24s.
- The HISTORY of GREECE. By C. THIRLWALL, D.D. Lord Bishop of St. David's. 8 vols. 8vo. £3; or in 8 vols. fcp. 28s.
- The TALE of the GREAT PERSIAN WAR, from the Histories of Herodotus. By GROEGE W. Cox, M.A. late Scholar of Trin. Coll. Oxon. Fcp. 7s. 6d.
- GREEK HISTORY from Themistocles to Alexander, in a Series of Lives from Plutarch. Revised and arranged by A. H. CLOUGH. Fcp. with 44 Woodcuts, 6s.
- CRITICAL HISTORY of the LANGUAGE and LITERATURE of Ancient Greece. By William Mure, of Caldwell. 5 vols. 8vo. £3 9s.
- HISTORY of the LITERATURE of ANCIENT GREECE. By Professor K. O. MÜLLER. Translated by the Right Hon. Sir George Cornewall Lewis, Bart. and by J. W. Donaldson, D.D. 3 vols. 8vo. 36s.
- HISTORY of the CITY of ROME from its Foundation to the Sixteenth Century of the Christian Era. By THOMAS H. DYER, LL.D. 8vo. with 2 Maps, 15s.
- HISTORY of the ROMANS under the EMPIRE. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Cabinet Edition, with Maps, complete in 8 vols. post 8vo. 48s.

- The FALL of the ROMAN REPUBLIC: a Short History of the Last Century of the Commonwealth. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Fourth Edition. 12mo. 7s. 6d.
- The CONVERSION of the ROMAN EMPIRE: the Boyle Lectures for the year 1864, delivered at the Chapel Royal, Whitehall. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Second Edition, 8vo. 8s. &d.
- The CONVERSION of the NORTHERN NATIONS; the Boyle Lectures for 1865. By the same Author. 8vo. 8s. 6d.
- CRITICAL and HISTORICAL ESSAYS contributed to the Edinburgh Review. By the Right Hon. LORD MACAULAY.

LIBRARY EDITION, 3 vols. 8vo. 36s.

TRAVELLER'S EDITION, in 1 vol. 21s.

CABINET EDITION, 3 vols. fcp. 21s.

PROPLE'S EDITION, 2 vols. crown 8vo. 8s.

- HISTORICAL and PHILOSOPHICAL ESSAYS. By NASSAU W. SENIOR. 2 vols. post 8vo. 16s.
- HISTORY of the RISE and INFLUENCE of the SPIRIT of RATIONALISM in EUROPE. By.W.E.H.LECKY, M.A. Second Edition, revised. 2 vols. 8vo. 25s.
- The HISTORY of PHILOSOPHY, from Thales to the Present Day.

 By George Herry Lewes. Third Edition, partly rewritten and greatly enlarged. In 2 vols. Vol. I. Ancient Philosophy; Vol. II. Modern Philosophy.
- HISTORY of the INDUCTIVE SCIENCES. By WILLIAM WHEWELL, D.D. F.R.S. late Master of Trin. Coll. Cantab. Third Edition. 3 vols. crown 8vo. 24s.
- HISTORY of SCIENTIFIC IDEAS; being the First Part of the Philosophy of the Inductive Sciences. By the same Author. 2 vols. cr. 8vo. 14s.
- EGYPT'S PLACE in UNIVERSAL HISTORY; an Historical Investigation. By C. C. J. Bunsen, D.D. Translated by C. H. Cottrell, M.A. With many Illustrations. 4 vols. 8vo. £5 8s. Vol. V. is nearly ready.
- MAUNDER'S HISTORICAL TREASURY; comprising a General Introductory Outline of Universal History, and a series of Separate Histories. Fcp. 10s.
- HISTORICAL and CHRONOLOGICAL ENCYCLOPÆDIA, presenting in a brief and convenient form Chronological Notices of all the Great Events of Universal History. By B. B. WOODWARD, F.S.A. Librarian to the Queen. [In the press.
- HISTORY of the CHRISTIAN CHURCH, from the Ascension of Christ to the Conversion of Constantine. By E. Burton, D.D. late Prof. of Divinity in the Univ. of Oxford. Eighth Edition. Fcp. 3s. 6d.
- SKETCH of the HISTORY of the CHURCH of ENGLAND to the Revolution of 1688. By the Right Rev. T. V. Short, D.D. Lord Bishop of St. Asaph. Seventh Edition. Crown 8vo. 10s.6d.
- HISTORY of the EARLY CHURCH, from the First Preaching of the Gospel to the Council of Nicæa, A.D. 325. By the Author of 'Amy Herbert.' Fcp. 4s. 6d.

- The ENGLISH REFORMATION. By F. C. MASSINGBERD, M.A. Chancellor of Lincoln and Rector of South Ormsby. Fourth Edition, revised. Fcp. 8vo. [Nearly ready.
- HISTORY of WESLEYAN METHODISM. By GEORGE SMITH, F.A.S. Fourth Edition, with numerous Portraits, 3 vols, or, 8vo, 7s. each.
- LECTURES on the HISTORY of MODERN MUSIC, delivered at the Royal Institution. By JOHN HULLAH. FIRST COURSE, with Chronological Tables, post 8vo. 6s. 6d. SECOND COURSE, on the Transition Period, with 40 Specimens, 8vo. 16s.

Biography and Memoirs.

- EXTRACTS of the JOURNALS and CORRESPONDENCE of MISS BERRY, from the Year 1783 to 1852. Edited by Lady THERESA LEWIS. Second Edition, with 3 Portraits. 3 vols. 8vo. 42s.
- The DIARY of the Right Hon. WILLIAM. WINDHAM, M.P. From 1783 to 1809. Edited by Mrs. HENRY BARING. 8vo. 18s.
- LIFE of the DUKE of WELLINGTON. By the Rev. G. R. GLEIG, M.A. Popular Edition, carefully revised; with copious Additions. Crown 8vo, with Portrait, 5s.
- Brialmont and Gleig's Life of the Duke of Wellington. (The Parent Work.) 4 vols. 8vo. with Illustrations, £2 14s.
- Life of the Duke of Wellington, Intermediate Edition, partly from the French of M. BRIALMONT, partly from Original Documents. By the Rev. G. R. Gleig, M.A. 8vo. with Portrait, 15s.
- HISTORY of MY RELIGIOUS OPINIONS. By J. H. NEWMAN, D.D. Being the Substance of Apologia pro Vitá Suå. Post 8vo. 6s.
- FATHER MATHEW: a Biography. By JOHN FRANCIS MAGUIRE, M.P. Popular Edition, with Portrait. Crown 8vo. 8s. 6d.
- Rome; its Rulers and its Institutions. By the same Author. New Edition in preparation.
- LIFE of AMELIA WILHELMINA SIEVEKING, from the German.
 Edited, with the Author's sanction, by CATHERINE WINKWORTH. Post 8vo.
 with Portrait, 12s.
- MOZART'S LETTERS (1769-1791), translated from the Collection of Dr. Ludwig Nohl by Lady Wallace. 2 vols. post 8vo. with Portrait and Facsimile, 18s.
- BEETHOVEN'S LETTERS (1790-1826), from the Two Collections of Drs. Nohl and discovered Letters to the Archduke Rudolph, Cardinal-Archbishop of Olmütz, Von Köchel. Translated by Lady Wallace. 2 vols. post 8vo. with Portrait.
- FELIX MENDELSSOHN'S LETTERS from Italy and Switzerland, and Letters from 1833 to 1847, translated by Lady Wallace. New Edition, with Portrait. 2 vols. crown 8vo. 5s. each.

- BECOLLECTIONS of the late WILLIAM WILBERFORCE, M.P. for the County of York during nearly 30 Years. By J. S. Harford, F.R.S. Second Edition. Post 8vo. 7s.
- MEMOIRS of SIR HENRY HAVELOCK, K.C.B. By JOHN CLARK MARSHMAN. Second Edition. 8vo. with Portrait, 12s. 6d.
- THOMAS MOORE'S MEMOIRS, JOURNAL, and CORRESPOND-ENCE. Edited and abridged from the First Edition by Earl RUSSELL. Square crown 8vo. with 8 Portraits, 12s. 6d.
- MEMOIR of the Rev. SYDNEY SMITH. By his Daughter, Lady HOLLAND. With a Selection from his Letters, edited by Mrs. Austin. 2 vols. 8vo. 28s.
- VICISSITUDES of FAMILIES. By Sir BERNARD BURKE, Ulster King of Arms. FIRST, SECOND, and THIED SERIES. 3 vols. crown 8vo. 12s. 6d. each.
- ESSAYS in ECCLESIASTICAL BIOGRAPHY. By the Right Hon. Sir J. STEPHEN, LL.D. Fourth Edition. 8vo. 14s.
- BIOGRAPHIES of DISTINGUISHED SCIENTIFIC MEN. By François Arago. Translated by Admiral W. H. Smyth, F.R.S. the Rev. B. Powell, M.A. and R. Grant, M.A. 8vo. 18s.
- MAUNDER'S BIOGRAPHICAL TREASURY: Memoirs, Sketches, and Brief Notices of above 12,000 Eminent Persons of All Ages and Nations. Fcp. 10s.
- LETTERS and LIFE of FRANCIS BACON, including all his Occasional Works. Collected and edited, with a Commentary, by J. Spedding, Trin. Coll. Cantab. Vols. I. and II. 8vo. 24s.

Criticism, Philosophy, Polity, &c.

- The INSTITUTES of JUSTINIAN; with English Introduction, Translation, and Notes. By T. C. SANDARS, M.A. Barrister, late Fellow of Oriel Coll. Oxon. Third Edition. 8vo. 15s.
- The ETHICS of ARISTOTLE. Illustrated with Essays and Notes. By Sir A. Grant, Bart. M.A. LL.D. Director of Public Instruction in the Bombay Presidency. Second Edition, revised and completed. 2 vols. 8vo.
- ELEMENTS of LOGIC. By R. WHATELY, D.D. late Archbishop of Dublin. Ninth Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.
- Elements of Rhetoric. By the same Author. Seventh Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.
- English Synonymes. Edited by Archbishop Whately. 5th Edition. Fcp. 3s.
- BACON'S ESSAYS with ANNOTATIONS. By R. WHATELY, D.D. late Archbishop of Dublin. Sixth Edition. 8vo.10s. 6d.

- LORD BACON'S WORKS, collected and edited by R. L. Ellis, M.A.
 J. Spedding, M.A. and D. D. Heath. Vols. I. to V. Philosophical Works,
 5 vols. 8vo. £4 6s. Vols. VI. and VII. Literary and Professional Works,
 2 vols. £1 16s.
- On REPRESENTATIVE GOVERNMENT. By JOHN STUART MILL, M.P. for Westminster. Third Edition, 8vo. 9s. crown 8vo. 2s.
- On Liberty. By the same Author. Third Edition. Post 8vo. 7s. 6d. crown 8vo. 1s. 4d.
- Principles of Political Economy. By the same. Sixth Edition. 2 vols. 8vo. 30s. or in 1 vol. crown 8vo. 5s.
- A System of Logic, Ratiocinative and Inductive. By the same. Sixth Edition. Two vols. 8vo. 25s.
- Utilitarianism. By the same. Second Edition. 8vo. 5s.
- Discertations and Discussions. By the same Author. 2 vols. 8vo. price 24s.
- Examination of Sir W. Hamilton's Philosophy, and of the Principal Philosophical Question discussed in his Writings. By the same Author. Second Edition. 8vo.14s.
- MISCELLANEOUS REMAINS from the Common-place Book of RICHARD WHATELY. D.D. late Archbishop of Dublin. Edited by Miss E. J. WHATELY. Crown 8vo. 7s. 6d.
- ESSAYS on the ADMINISTRATIONS of GREAT BRITAIN from 1783 to 1830. By the Right Hon. Sir G. C. Lewis, Bart. Edited by the Right Hon. Sir E. Head, Bart. 8vo. with Portrait, 15s.

By the same Author.

- Inquiry into the Credibility of the Early Roman History, 2 vols. price 30s.
- On the Methods of Observation and Reasoning in Politics, 2 vols. price 28s.
- Irish Disturbances and Irish Church Question, 12s.
- Remarks on the Use and Abuse of some Political Terms, 9a.
- The Fables of Babrius, Greek Text with Latin Notes, Part I. 5s. 6d. Part II. 3s. 6d.
- An OUTLINE of the NECESSARY LAWS of THOUGHT: a Treatise on Pure and Applied Logic. By the Most Rev. W. Thomson, D.D. Archbishop of York. Crown 8vo. 5s. 6d.
- The ELEMENTS of LOGIC. By THOMAS SHEDDEN, M.A. of St. Peter's Coll. Cantab. 12mo. 4s. 6d.
- ANALYSIS of Mr. MILL'S SYSTEM of LOGIC. By W. Stebbing, M.A. Fellow of Worcester College, Oxford. Second Edition. 12mo. 8s. 6d.
- The ELECTION of REPRESENTATIVES, Parliamentary and Municipal; a Treatise. By Thomas Hare, Barrister-at-Law. Third Edition, with Additions. Crown 8vo. 6s.

- SPEECHES of the RIGHT HON. LOBD MACAULAY, corrected by Himself. Library Edition, 8vo. 12s. People's Edition, crown 8vo. 3s. 6d.
- LORD MACAULAY'S SPEECHES on PARLIAMENTARY REFORM in 1831 and 1832. 16mo. 1s.
- A DICTIONARY of the ENGLISH LANGUAGE. By R. G. LATHAM, M.A. M.D. F.R.S. Founded on the Dictionary of Dr. S. Johnson, as edited by the Rev. H. J. Todd, with numerous Emendations and Additions. Publishing in 36 Parts, price 3s. 6d. each, to form 2 vols. 4to.
- THESAURUS of ENGLISH WORDS and PHRASES, classified and arranged so as to facilitate the Expression of Ideas, and assist in Literary Composition. By P. M. ROGET, M.D. 18th Edition. Crown 8vo. 10s. 6d.
- LECTURES on the SCIENCE of LANGUAGE, delivered at the Royal Institution. By Max Müller, M.A. Taylorian Professor in the University of Oxford. First Series, Fourth Edition, 12s. Second Series, 18s.
- CHAPTERS on LANGUAGE. By FREDERIC W. FARRAR, M.A. late Fellow of Trin. Coll. Cambridge, Author of 'The Origin of Language,' &c. Crown 8vo. 8s. 6d.
- The DEBATER; a Series of Complete Debates, Outlines of Debates, and Questions for Discussion. By F. Rowton. Fep. 6s.
- A COURSE of ENGLISH READING, adapted to every taste and capacity: or. How and What to Read. By the Rev. J. PYCROFT, B.A. Fourth Edition. Fcp. 5s.
- MANUAL of ENGLISH LITERATURE, Historical and Critical: with a Chapter on English Metres. By THOMAS ARNOLD, B.A. Post 8vo. 10s. 6d.
- SOUTHEY'S DOCTOR, complete in One Volume. Edited by the Rev. J. W. Warter, B.D. Square crown 8vo. 12s. 6d.
- HISTORICAL and CRITICAL COMMENTARY on the OLD TESTA-MENT; with a New Translation. By M. M. Kalisch, Ph.D. Vol. I. Genesis, 8vo. 18s. or adapted for the General Reader, 12s. Vol. II. Exodus, 15s. or adapted for the General Reader, 12s.
- A Hebrew Grammar, with Exercises. By the same. Part I. Outlines with Exercises, 8vo. 12s. 6d. Key, 5s. Part II. Exceptional Forms and Constructions, 12s. 6d.
- A LATIN-ENGLISH DICTIONARY. By J. T. WHITE, M.A. of Corpus Christi College, and J. E. RIDDLE, M.A. of St. Edmund Hall, Oxford. Imperial 8vo. pp. 2,128, price 42s. cloth.
- A New Latin-English Dictionary, abridged from the larger work of White and Riddle (as above), by J. T. White, M.A. Joint-Author. Medium 8vo. pp. 1,048, price 18s. cloth.
- The Junior Scholar's Latin-English Dictionary, abridged from the larger works of White and Riddle (as above), by J. T. White, M.A. surviving Joint-Author. Square 12mo. pp. 662, price 7s. 6d. cloth.

- An ENGLISH-GREEK LEXICON, containing all the Greek Words used by Writers of good authority. By C. D. Yonge, B.A. Fifth Edition. 4to. 21s.
- Mr. YONGE'S NEW LEXICON, English and Greek, abridged from his larger work (as above). Revised Edition. Square 12mo. 8s. 6d.
- A GREEK-ENGLISH LEXICON. Compiled by H. G. LIDDELL, D.D. Dean of Christ Church, and E. Scott, D.D. Master of Balliol. Fifth Edition. Crown 4to, 31s. 6d.
- A Lexicon, Greek and English, abridged from Liddell and Scott's Greek-English Lexicon. Eleventh Edition. Square 12mo. 7s. 6d.
- A SANSKRIT-ENGLISH DICTIONARY, the Sanskrit words printed both in the original Devanagari and in Roman letters; with References to the Best Editions of Sanskrit Authors, and with Etymologies and Comparisons of Cognate Words chiefly in Greek, Latin. Gothic, and Anglo-Saron. Compiled by T. Benfey, Prof. in the Univ. of Göttingen. 8vo. 52s. 6d.
- A PRACTICAL DICTIONARY of the FRENCH and ENGLISH LANGUAGES. By L. CONTANSRAU. Tenth Edition. Post 8vo. 10s. 6d.
- Contanseau's Pocket Dictionary, French and English, abridged from the above by the Author. Third Edition, 18mo. 5s.
- NEW PRACTICAL DICTIONARY of the GERMAN LANGUAGE;
 German-English and English-German.
 By the Rev. W. L. BLACKLEY, M.A.
 Post 8vo.
 [Nearly ready.

Miscellaneous Works and Popular Metaphysics.

- RECREATIONS of a COUNTRY PARSON. By A. K. H. B. First Series, with 41 Woodcut Illustrations from Designs by R. T. Pritchett. Crown 8vo. 12s. 6d.
- Recreations of a Country Parson. Second Series. Cr. 8vo. 3s. 6d.
- The Common-place Philosopher in Town and Country. By the same Author. Crown 8vo. 3s. 6d.
- Leisure Hours in Town; Essays Consolatory, Æsthetical, Moral, Social, and Domestic. By the same Author. Crown 8vo. 3s. 6d.
- The Autumn Holidays of a Country Parson; Essays contributed to Fraser's Magazine and to Good Words. By the same. Crown 8vo. 3s. 6d.
- The Graver Thoughts of a Country Parson. Second Series. By the same Author. Crown 8vo. 3s. 6d.
- Critical Essays of a Country Parson. Selected from Essays contributed to Fraser's Magazine. By the same Author. Post 8vo. 9s.
- A CAMPAIGNEE AT HOME. By SHIRLEY, Author of 'Thalatta' and 'Nugse Criticse.' Post 8vo. with Vignette, 7s. 6d.

STUDIES in PARLIAMENT. A Series of Sketches of Leading Politicians. By R. H. HUTTON. [Reprinted from the 'Pall Mail Gazette.']

LORD MACAULAY'S MISCELLANEOUS WRITINGS.

LIBRARY EDITION. 2 vols. 8vo. Portrait, 21s.

PEOPLE'S EDITION. 1 vol. crown 8vo. 4s. 6d.

The REV. SYDNEY SMITH'S MISCELLANEOUS WORKS; including his Contributions to the Edinburgh Review.

LIBRARY EDITION, 3 vols. 8vo. 36s.

TRAVELLER'S EDITION, in 1 vol. 21s.

CABINET EDITION, 3 vols. fcp. 21s.

PEOPLE'S EDITION, 2 vols. crown 8vo. 8s.

- Elementary Sketches of Moral Philosophy, delivered at the Royal Institution. By the same Author. Fcp. 7s.
- The Wit and Wisdom of the Rev. Sydney Smith: a Selection of the most memorable Passages in his Writings and Conversation. 16mo. 5s.
- EPIGRAMS, Ancient and Modern; Humorous, Witty, Satirical, Moral, and Panegyrical. Edited by Rev. John Booth, B.A. Cambridge. Second Edition, revised and enlarged. Fcp. 7s. 6d.
- From MATTER to SPIRIT: the Result of Ten Years' Experience in Spirit Manifestations. By SOPHIA E. DE MORGAN. With a PREFACE by Professor DE MORGAN. Post 8vo. 8s. 6d.
- ESSAYS selected from CONTRIBUTIONS to the Edinburgh Review. By HENRY ROGERS. Second Edition. 3 vols. fcp. 21s.
- The Eclipse of Faith; or, a Visit to a Religious Sceptic. By the same Author. Eleventh Edition. Fcp. 5s.
- Defence of the Eclipse of Faith, by its Author; a rejoinder to Dr. Newman's Reply. Third Edition. Fcp. 3s. 6d.
- Selections from the Correspondence of R. E. H. Greyson. By the same Author. Third Edition. Crown 8vo. 7s. 6d.
- Fulleriana, or the Wisdom and Wit of Thomas Fuller, with Essay on his Life and Genius. By the same Author. 16mo. 2s. 6d.
- An ESSAY on HUMAN NATURE; showing the Necessity of a Divine Revelation for the Perfect Development of Man's Capacities. By Henry S. Boase, M.D. F.R.S. and G.S.
- The PHILOSOPHY of NATURE; a Systematic Treatise on the Causes and Laws of Natural Phænomena. By the same Author. 8vo. 12s.
- An INTRODUCTION to MENTAL PHILOSOPHY, on the Inductive Method. By. J. D. MORELL, M.A. LL.D. 8vo. 12s.
- Elements of Psychology, containing the Analysis of the Intellectual Powers. By the same Author. Post 8vo.7s. 6d.

- The SECRET of HEGEL: being the Hegelian System in Origin, Principle, Form, and Matter. By JAMES HUTCHISON STIRLING. 2 vols. 8vo. 28s.
- SIGHT and TOUCH: an Attempt to Disprove the Received (or Berkeleian) Theory of Vision. By THOMAS K. ABBOTT, M.A. Fellow and Tutor of Trin. Coll. Dublin. 8vo. with 21 Woodcuts, 5s. 6d.
- The SENSES and the INTELLECT. By ALEXANDER BAIN, M.A.

 Professor of Logic in the University of Aberdeen. Second Edition. 8vo.

 price 15s.
- The Emotions and the Will, by the same Author; completing a Systematic Exposition of the Human Mind. 8vo. 15s.
- On the Study of Character, including an Estimate of Phrenology. By the same Author. 8vo. 9s.
- TIME and SPACE: a Metaphysical Essay. By Shadworth H. Hodgson. 8vo. pp. 588, price 16s.
- The WAY to REST: Results from a Life-search after Religious Truth. By R. VAUGHAN, D.D.
- HOURS WITH THE MYSTICS: a Contribution to the History of Religious Opinion. By ROBERT ALFRED VAUGHAN, B.A. Second Edition. 2 vols. crown 8vo. 12s.
- The PHILOSOPHY of NECESSITY; or Natural Law as applicable to Mental, Moral, and Social Science. By Charles Bray. Second Edition. 8vo. 9s.
- The Education of the Feelings and Affections. By the same Author. Third Edition. 8vo. 3s. 6d.
- CHRISTIANITY and COMMON SENSE. By Sir WILLOUGHBY JONES, Bart. M.A. Trin. Coll. Cantab. 8vo. 6s.

Astronomy, Meteorology, Popular Geography, &c.

- OUTLINES of ASTRONOMY. By Sir J. F. W. Herschel, Bart. M.A. Eighth Edition, revised; with Plates and Woodcuts. 8vo. 18s.
- ARAGO'S POPULAR ASTRONOMY. Translated by Admiral W. H. SMYTH, F.R.S. and R. GRANT, M.A. With 25 Plates and 358 Woodcuts. 2 vols. 8vo. £2 5s.
- SATURN and its SYSTEM. By RICHARD A. PROCTOR, B.A. late Scholar of St John's Coll. Camb. and King's Coll. London. Svo. with 14 Plates, 14s.
- CELESTIAL OBJECTS for COMMON TELESCOPES. By the Rev. T. W. Webb, M.A. F.R.A.S. With Map of the Moon, and Woodcuts. 16mo. 7s.
- PHYSICAL GEOGRAPHY for SCHOOLS and GENERAL READERS. By M. F. MAURY, LL.D. Fop. with 2 Charts, 2s. cd.

- M'CULLOCH'S DICTIONARY, Geographical, Statistical, and Historical, of the various Countries, Places, and Principal Natural Objects in the World. Revised Edit. printed in a larger type, with Maps, and with the Statistical Information throughout brought up to the latest returns by F. MARTIN. 4 vols. 8 vo. 21s. each. Vol. 1. now ready.
- A GENERAL DICTIONARY of GEOGRAPHY, Descriptive, Physical, Statistical, and Historical: forming a complete Gazetteer of the World. By A. Keith Johnston, F.R.S.E. 8vo. 31s. 6d.
- A MANUAL of GEOGRAPHY, Physical, Industrial, and Political. By W. HUGHES, F.R.G.S. Professor of Geography in King's College, and in Queen's College, London. With 6 Maps. Fcp. 7s. 6d.
- The Geography of British History; a Geographical Description of the British Islands at Successive Periods. By the same. With 6 Maps. Fcp. 8s. 6d.
- Abridged Text-Book of British Geography. By the same. Fcp. 1s. 6d.
- MAUNDER'S TREASURY of GEOGRAPHY, Physical, Historical, Descriptive, and Political. Edited by W. Hughes, F.R.G.S. With 7 Maps and 16 Plates. Fcp. 10s. 6d.

Natural History and Popular Science.

- The ELEMENTS of PHYSICS or NATURAL PHILOSOPHY. By NEIL ARNOTT, M.D. F.R.S. Physician Extraordinary to the Queen. Sixth Edition, rewritten and completed. 2 Parts, 8vo. 21s.
- HEAT CONSIDERED as a MODE of MOTION. By Professor JOHN TYNDALL, LL.D. F.R.S. Second Edition. Crown 8vo. with Woodcuts, 12s. 6d.
- VOLCANOS, the Character of their Phenomena, their Share in the Structure and Composition of the Surface of the Globe, &c. By G. POULETT SCROPE, M.P. F.R.S. Second Edition. 8vo. with Illustrations, 15s.
- A TREATISE on ELECTRICITY, in Theory and Practice. By A. DE LA RIVE, Prof. in the Academy of Geneva. Translated by C. V. WALKER, F.R.S. 3 vois. 8vo. with Woodcuts, £3 13s.
- The CORRELATION of PHYSICAL FORCES. By W. R. GROVE, Q.C. V.P.R.S. Fourth Edition. 8vo. 7s. 6d.
- MANUAL of GEOLOGY. By S. HAUGHTON, M.D. F.R.S. Fellow of Trin. Coll. and Prof. of Geol. in the Univ. of Dublin. Revised Edition, with 66 Woodcuts. Fcp. 6s.
- A GUIDE to GEOLOGY. By J. PHILLIPS, M.A. Professor of Geology in the University of Oxford. Fifth Edition, with Plates. Fcp. 4s.
- A GLOSSARY of MINERALOGY. By H. W. BRISTOW, F.G.S. of the Geological Survey of Great Britain. With 486 Figures. Crown 8vo. 12s.
- PHILLIPS'S ELEMENTARY INTRODUCTION to MINERALOGY, with extensive Alterations and Additions, by H. J. BROOKE, F.R.S. and W. H. MILLER, F.G.S. Post 8vo. with Woodcuts, 18s.

- VAN DER HOEVEN'S HANDBOOK of ZOOLOGY. Translated from the Second Dutch Edition by the Rev. W. Clark, M.D. F.R.S. 2 vols. 8vo. with 24 Plates of Figures, 60s.
- The COMPARATIVE ANATOMY and PHYSIOLOGY of the VERTEbrate Animals. By RICHAED OWEN, F.R.S. D.C.L. 3 vols. 8vo. with upwards of 1,200 Woodcuts. Vols. I. and II. price 21s. each, now ready.
- HOMES WITHOUT HANDS: a Description of the Habitations of Animals, classed according to their Principle of Construction. By Rev. J. G. Wood, M.A. F.L.S. With about 140 Vignettes on Wood (20 full size of page). Second Edition. 8vo. 21s.
- MANUAL of CORALS and SEA JELLIES. By J. R. GREENE, B.A. Edited by the Rev. J. A. GALBRAITH, M.A. and the Rev. S. HAUGHTON, M.D. Fep. with 39 Woodcuts, 5s.
- Manual of Sponges and Animalculæ; with a General Introduction on the Principles of Zoology. By the same Author and Editors. Fcp. with 16 Woodcuts, 2s.
- Manual of the Metalloids. By J. Apjohn, M.D. F.R.S. and the same Editors. Revised Edition. Fep. with 38 Woodcuts, 7s. 6d.
- The HARMONIES of NATURE and UNITY of CREATION. By Dr. GEORGE HARTWIG. 8vo. with numerous Illustrations.
- The Sea and its Living Wonders. By the same Author. Second (English) Edition. 8vo. with many Illustrations. 18s.
- The Tropical World. By the same Author. With 8 Chromoxylographs and 172 Woodcuts. 8vo. 21s.
- SKETCHES of the NATURAL HISTORY of CEYLON. By Sir J. EMERSON TENNENT, K.C.S. LL.D. With 82 Wood Engravings. Post 8vo. price 12s. 6d.
- Ceylon. By the same Author. Fifth Edition; with Maps, &c. and 90 Wood Engravings. 2 vols. 8vo. £2 10s
- A FAMILIAR HISTORY of BIRDS. By E. STANLEY, D.D. F.R.S. late Lord Bishop of Norwich. Seventh Edition, with Woodcuts. Fcp. 3s. 6d.
- MARVELS and MYSTERIES of INSTINCT; or, Curiosities of Animal Life. By G. Garratt. Third Edition. Fcp. 7s.
- HOME WALKS and HOLIDAY RAMBLES. By the Rev. C. A. JOHNS, B.A. F.L.S. Fcp. 8vo. with 10 Illustrations, 6s.
- KIRBY and SPENCE'S INTRODUCTION to ENTOMOLOGY, or Elements of the Natural History of Insects. Seventh Edition. Crown 8vo. price 5s.
- MAUNDER'S TREASURY of NATURAL HISTORY, or Popular Dictionary of Zoology. Revised and corrected by T. S. Cobbold, M.D. Fep. with 900 Woodcuts, 10s.
- The TREASURY of BOTANY, or Popular Dictionary of the Vegetable Kingdom; with which is incorporated a Glossary of Botanical Terms. Edited by J. LINDLEY, F.R.S. and T. MOORE, F.L.S. assisted by eminent Contributors. Pp. 1,274, with 274 Woodcuts and 20 Steel Plates. 2 Parts, fep. 20s.

- The ELEMENTS of BOTANY for FAMILIES and SCHOOLS.
 Tenth Edition, revised by THOMAS MOORE, F.L.S. Fcp. with 154 Woodcuts, 2s. 6d.
- The ROSE AMATEUR'S GUIDE. By Thomas Rivers. New Edition. Fop. 4s.
- The BRITISH FLORA; comprising the Phænogamous or Flowering Plants and the Ferns. By Sir W. J. HOOKER, K.H. and G. A. WALKER-ARNOTT, LL.D. 12mo. with 12 Plates, 14s. or coloured, 21s.
- BRYOLOGIA BRITANNICA; containing the Mosses of Great Britain and Ireland, arranged and described. By W. Wilson. 8vo. with 61 Plates 42s. or coloured, £44s.
- The INDOOR GARDENER. By Miss Maline. Fcp. with Frontispiece, printed in Colours, 5s.
- LOUDON'S ENCYCLOPÆDIA of PLANTS; comprising the Specific Character, Description, Culture, History, &c. of all the Plants found in Great Britain. With upwards of 12,000 Woodcuts. 8vo. £3 13s. 6d.
- Loudon's Encyclopædia of Trees and Shrubs; containing the Hardy Trees and Shrubs of Great Britain scientifically and popularly described. With 2,000 Woodcuts. 8vo. 50s.
- MAUNDER'S SCIENTIFIC and LITERARY TREASURY; a Popular Encyclopædia of Science, Literature, and Art. Fcp. 10s.
- A DICTIONARY of SCIENCE, LITERATURE, and ART. Fourth Edition, re-edited by W. T. Brande (the Author), and George W. Cox. M.A. assisted by gentlemen of eminent Scientific and Literary Acquirements. 3 vols. medium 8vo. price 63s. cloth.
- ESSAYS on SCIENTIFIC and other SUBJECTS, contributed to Reviews. By Sir H. HOLLAND, Bart. M.D. Second Edition. 8vo. 14s.
- ESSAYS from the EDINBURGH and QUARTERLY REVIEWS; with Addresses and other Pieces. By Sir J. F. W. HERSCHEL, Bart. M.A. 8vo. 18s.

Chemistry, Medicine, Surgery, and the Allied Sciences.

- A DICTIONARY of CHEMISTRY and the Allied Branches of other Sciences; founded on that of the late Dr. Ure. By HENRY WATTS, F.C.S. assisted by eminent Contributors. 5 vols, medium 8vo. in course of publication in Parts. Vol. I. 31s. 6d. Vol. II. 25s. Vol. III. 31s. 6d. are now ready.
- HANDBOOK of CHEMICAL ANALYSIS. Adapted to the Unitary System of Notation. By F. T. CONINGTON, M.A. F.C.S. Post 8vo. 7s. 6d.—TABLES of QUALITATIVE ANALYSIS adapted to the same, 2s. 6d.
- A HANDBOOK of VOLUMETRICAL ANALYSIS. By ROBERT H. SCOTT, M.A. T.C.D. Post 8vo. 4s. 6d.

- ELEMENTS of CHEMISTRY, Theoretical and Practical. By WILLIAM A. MILLER, M.D. LL.D. F.R.S. F.G.S. Professor of Chemistry, King's College, London. 5 vols. 8vo. £2 13s. Part I. Chemical Physics. Third Edition, 12s. Part II. INGRANIC CHEMISTRY, 21s. Part III. Organic Chemistry, Second Edition, 20s.
- A MANUAL of CHEMISTRY, Descriptive and Theoretical. By WILLIAM ODLING, M.B. F.R.S. PART I. 8vo. 9s.
- A Course of Practical Chemistry, for the use of Medical Students. By the same Author. Second Edition, with 70 new Woodcuts. Crown Svo. price 7s. 6d.
- Lectures on Animal Chemistry, delivered at the Royal College of Physicians in 1865. By the same Author. Crown 8vo. 4s. 6d.
- The DIAGNOSIS and TREATMENT of the DISEASES of WOMEN; including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D. 8vo. 16s.
- LECTURES on the DISEASES of INFANCY and CHILDHOOD. By CHARLES WEST, M.D. &c. Fifth Edition, revised and enlarged. 8vo. 16s.
- EXPOSITION of the SIGNS and SYMPTOMS of PREGNANCY:
 with other Papers on subjects connected with Midwifery. By W. F.
 Montgomery, M.A. M.D. M.R.I.A. 8vo. with Illustrations, 25s.
- A SYSTEM of SURGERY, Theoretical and Practical. In Treatises by Various Authors. Edited by T. Holmes, M.A. Cantab. Assistant-Surgeon to St. George's Hospital. 4 vols. 8vo. £413s.
- Vol. I. General Pathology. 21s.
- Vol. II. Local Injuries: Gunshot Wounds, Injuries of the Head, Back, Face, Neck, Chest, Abdomen, Pelvis, of the Upper and Lower Extremities, and Diseases of the Eye. 21s.
- Vol. III. Operative Surgery Diseases of the Organs of Circulation, Locomotion, &c. 21s.
- Vol. IV. Diseases of the Organs of Digestion, of the Genito-Urinary System, and of the Breast, Thyroid Glaud, and Skin; with APPENDIX and GENERAL INDEX. 30s.
- LECTURES on the PRINCIPLES and PRACTICE of PHYSIC. By THOMAS WATSON, M.D. Physician-Extraordinary to the Queen. Fourth Edition. 2 vols. 8vo. 34s.
- LECTURES on SURGICAL PATHOLOGY. By J. PAGET, F.R.S. Surgeon-Extraordinary to the Queen. Edited by W. TURNER, M.B. 8vo. with 117 Woodcuts, 21s.
- A TREATISE on the CONTINUED FEVERS of GREAT BRITAIN. By C. Murchison, M.D. Senior Physician to the London Fever Hospital. 8vo. with coloured Plates, 18s.
- ANATOMY, DESCRIPTIVE and SURGICAL. By HENRY GRAY, F.R.S. With 410 Wood Engravings from Dissections. Third Edition, by T. Holmes. M.A. Cantab. Royal 8vo. 28s.
- The CYCLOPÆDIA of ANATOMY and PHYSIOLOGY. Edited by the late R. B. TODD, M.D. F.R.S. Assisted by nearly all the most eminent cultivators of Physiological Science of the present age. 5 vols. 8vo. with 2,853 Woodcuts, £8 6s.

- PHYSIOLOGICAL ANATOMY and PHYSIOLOGY of MAN. By the late R. B. Todd, M.D. F.R.S. and W. Bowman, F.R.S. of King's College. With numerous Illustrations. Vol. II. 8vo. 25s.
- A DICTIONARY of PRACTICAL MEDICINE. By J. COPLAND, M.D. F.R.S. Abridged from the larger work by the Author, assisted by J. C. COPLAND, M.R.C.S. and throughout brought down to the present State of Medical Science. Pp. 1,560 in 8vo. price 36s.
- Dr. Copland's Dictionary of Practical Medicine (the larger work). 3 vols. 8vo. £5 11s.
- The WORKS of SIR B. C. BRODIE, Bart. collected and arranged by CHARLES HAWKINS, F.R.C.S.E. 3 vols. 8vo. with Medallion and Facsimile, 48s.
- Autobiography of Sir B. C. Brodie, Bart. Printed from the Author's materials left in MS. Second Edition, Fcp. 4s. 6d.
- The TOXICOLOGIST'S GUIDE: a New Manual on Poisons, giving the Best Methods to be pursued for the Detection of Poisons (post-mortem or otherwise). By JOHN HORSLEY, F.C.S. Analytical Chemist.
- A MANUAL of MATERIA MEDICA and THERAPEUTICS, abridged from Dr. Pereira's Elements by F. J. Farre, M.D. assisted by R. Bentley, M.R.C.S. and by R. Warington, F.R.S. 8vo. with 90 Woodcuts, 21s.
- Dr. Pereira's Elements of Materia Medica and Therapeutics. Third Edition. By A. S. TAYLOE, M.D. and G. O. REES, M.D. 3 vols. 8vo. with Woodcuts, £3 15s.
- THOMSON'S CONSPECTUS of the BRITISH PHARMACOPŒIA.

 Twenty-fourth Edition, corrected and made conformable throughout to the
 New Pharmacopeia of the General Council of Medical Education. By E.

 LLOYD BIRKETT, M.D. 18mo. 5s. 6d.
- MANUAL of the DOMESTIC PRACTICE of MEDICINE. By W. B. KESTEVEN, F.R.C.S.E. Second Edition, revised, with Additions. Fcp. 5s.
- The RESTORATION of HEALTH; or, the Application of the Laws of Hygiene to the Recovery of Health: a Manual for the Invalid, and a Guide in the Sick Room. By W. STRANGE, M.D. Fep. 6s.
- SEA-AIR and SEA-BATHING for CHILDREN and INVALIDS By the same Author. Fcp. boards, 3s.
- MANUAL for the CLASSIFICATION, TRAINING, and EDUCATION of the Feeble-Minded, Imbecile, and Idiotic. By P. MARTIN DUNCAN, M.B. and WILLIAM MILLARD. Crown 8vo. 5s.

The Fine Arts, and Illustrated Editions.

The NEW TESTAMENT, illustrated with Wood Engravings after the Early Masters, chiefly of the Italian School. Crown 4to. 63s. cloth, gilt top or £5 5s. elegantly bound in morocco.

- LYRA GERMANICA; Hymns for the Sundays and Chief Festivais of the Christian Year. Translated by CATHERINE WINEWORTH; 125 Illustrations on Wood drawn by J. LEIGHION, F.S.A. Fcp. 4to. 21s.
- The LIFE of MAN SYMBOLISED by the MONTHS of the YEAR in their Seasons and Phases; with Passages selected from Ancient and Modern Authors. By RICHARD PHOFT. Accompanied by a Series of 25 full-page Illustrations and numerous Marginal Devices, Decorative Initial Letters, and Tailpieces, engraved on Wood from Original Designs by JOHN LEIGHTON, F.S.A. 440, 42s.
- CATS' and FARLIE'S MORAL EMBLEMS; with Aphorisms, Adages, and Proverbs of all Nations: comprising 121 Illustrations on Wood by J. LEIGHTON, F.S.A. with an appropriate Text by R. PIGOT. Imperial 8vo. 31s. 3d.
- SHAKSPEARE'S SENTIMENTS and SIMILES, printed in Black and Gold, and Illuminated in the Missal Style by HENRY NOEL HUMPHREYS. In massive covers, containing the Medallion and Cypher of Shakspeare. Square post 8vo. 21s.
- The HISTORY of OUR LORD, as exemplified in Works of Art.

 Being the fourth and concluding series of 'Sacred and Legendary Art.' By
 Mrs. JAMESON and Lady EASTLARE. Second Edition, with 18 Etchings
 and 281 Woodcuts. 2 vols. square crown 8vo. 42s.

In the same Series, by Mrs. JAMESON.

- Legends of the Saints and Martyrs. Fourth Edition, with 19 Etchings and 187 Woodcuts. 2 vols. 31s. 6d.
- Legends of the Monastic Orders. Third Edition, with 11 Etchings and 88 Woodcuts. 1 vol. 21s.
- Legends of the Madonna. Third Edition, with 27 Etchings and 165 Woodcuts. 1 vol. 21s.

Arts, Manufactures, &c.

- DRAWING from NATURE; a Series of Progressive Instructions in Sketching, from Elementary Studies to Finished Views, with Examples from Switzerland and the Pyrenees. By GEORGE BARNARD, Professor of Drawing at Rugby School. With 18 Lithographic Plates, and 108 Wood Engravings. Imp. 8vo. 25s.
- ENCYCLOPÆDIA of ARCHITECTURE, Historical, Theoretical, and Practical. By JOSEPH GWILT. With more than 1,000 Woodcuts. 8vp. 42s.
- TUSCAN SCULPTORS, their Lives, Works, and Times. With 45 Etchings and 28 Woodcuts from Original Drawings and Photographs. By CHARLES C. PERKINS. 2 vols. imperial 8vo. 63s.
- The GRAMMAR of HERALDRY: containing a Description of all the Principal Charges used in Armory, the Signification of Heraldic Terms, and the Rules to be observed in Blazoning and Marshalling, By JOHN E. CUSBANS. Fep. with 196 Woodcuts, 4s. 6d.
- The ENGINEER'S HANDBOOK; explaining the Principles which should guide the young Engineer in the Construction of Machinery. By C. S. LOWNDES. Post 8vo. 5s.

- The ELEMENTS of MECHANISM. By T. M. Goodeve, M.A. Professor of Mechanics at the R. M. Acad. Woolwich. Second Edition, with 217 Woodcuts. Post 8vo. 6s. 6d.
- URE'S DICTIONARY of ARTS, MANUFACTURES, and MINES.

 Re-written and enlarged by ROBERT HUNT, F.R.S. assisted by numerous gentlemen emineut in Science and the Arts. With 2,000 Woodcuts. 3 vols. 8vo. 24.
- ENCYCLOPÆDIA of CIVIL ENGINEERING, Historical, Theoretical, and Practical. By E. CRESY, C.E. With above 3,000 Woodcuts. 8vo. 42s.
- TREATISE on MILLS and MILLWORK. By W. FAIRBAIRN, C.E. Second Edition, with 18 Plates and 322 Woodcuts. 2 vols. 8vo. 32s.
- Useful Information for Engineers. By the same Author. FIRST and SECOND SERIES, with many Plates and Woodcuts. 2 vols. crown 8vo. 10s. 6d. each.
- The Application of Cast and Wrought Iron to Building Purposes. By the same Author. Third Edition, with 6 Plates and 118 Woodcuts. 8vo.16s.
- IRON SHIP BUILDING, its History and Progress, as comprised in a Series of Experimental Researches on the Laws of Strain; the Strengths, Forms, and other conditions of the Material; and an Inquiry into the Present and Prospective State of the Navy, including the Experimental Results on the Resisting Powers of Armour Plates and Shot at High Velocities. By the same Author. With 4 Plates and 130 Woodcuts. 8vo.18s.
- The PRACTICAL MECHANIC'S JOURNAL: an Illustrated Record of Mechanical and Engineering Science, and Epitome of Patent Inventions. 4to. price 1s. monthly.
- The PRACTICAL DRAUGHTSMAN'S BOOK of INDUSTRIAL DE-SIGN. By W. JOHNSON, Assoc. Inst. C.E. With many hundred Illustrations, 4to. 22s. 6d.
- The PATENTEE'S MANUAL. a Treatise on the Law and Practice of Letters Patent for the use of Patentees and Inventors. By J. and J. H. JOHNSON. Post 8vo. 7s. 6d.
- The ARTISAN CLUB'S TREATISE on the STEAM ENGINE, in its various Applications to Mines, Mills, Steam Navigation, Railways and Agriculture. By J. BOURNE, C.E. Seventh Edition; with 37 Plates and 546 Woodcuts. 4to. 42s.
- Catechism of the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By the same Author. With 199 Woodcuts. Fcp. 9s. The INTRODUCTION of 'Recent Improvements' may be had separately, with 110 Woodcuts, price 3s. 6c.
- Handbook of the Steam Engine. By the same Author, forming a KEY to the Catechism of the Steam Engine, with 67 Woodcuts. Fcp. 9s.
- A TREATISE on the SCREW PROPELLER, SCREW VESSELS, and Screw Engines, as adapted for purposes of Peace and War; illustrated by many Plates and Woodcuts. By the same Author. New and enlarged Edition, in course of publication in 24 Parts. Royal 4to. 2s. 6d. each.
- The THEORY of WAR Illustrated by numerous Examples from History. By Lieut.-Col. P. L. MacDougall. Third Edition, with 10 Plans, Post 8vo. 10s. 6d.

Digitized by Google

- The ART of PERFUMERY; the History and Theory of Odours, and the Methods of Extracting the Aromas of Plants. By Dr. Pieser, F.C.S. Third Edition, with 53 Woodcuts. Crown 8vo. 10s. 6d.
- Chemical, Natural, and Physical Magic, for Juveniles during the Holidays. By the same Author. Third Edition, enlarged, with 38 Woodcuts. Fcp. 6s.
- TALPA; or the Chronicles of a Clay Farm. By C. W. Hoskyns, Esq. Sixth Edition, with 24 Woodcuts by G. CRUIKSHANK. 16mo. 5s. 6d.
- LOUDON'S ENCYCLOPEDIA of AGRICULTURE: comprising the Laying-out, Improvement, and Management of Landed Property, and the Cultivation and Economy of the Productions of Agriculture. With 1,100 Woodcuts. 8vo. 31s. 6d.
- London's Encylopædia of Gardening: comprising the Theory and Practice of Horticulture, Floriculture, Arboriculture, and Landscape Gardening. With 1,000 Woodcuts. 8vo. 31s. 6d.
- Loudon's Encyclopædia of Cottage, Farm, and Villa Architecture and Furniture. With more than 2,000 Woodcuts. 8vo. 42s.
- HISTORY of WINDSOR GREAT PARK and WINDSOR FOREST.

 By WILLIAM MENZIES, Resident Deputy Surveyor. With 2 Maps and 20 Photographs. Imp. folio, £8 8s.
- BAYLDON'S ART of VALUING RENTS and TILLAGES, and Claims of Tenants upon Quitting Farms, both at Michaelmas and Lady-Day. Eighth Edition, revised by J. C. MORTON. 8vo. 10s. 6d.

Religious and Moral Works.

- An EXPOSITION of the 39 ARTICLES, Historical and Doctrinal. By E. Habold Browne, D.D. Lord Bishop of Ely. Seventh Edit. 8vo. 16s.
- The Pentateuch and the Elohistic Psalms, in Reply to Bishop Colenso. By the same. Second Edition. 8vo. 2s.
- Examination Questions on Bishop Browne's Exposition of the Articles. By the Rev. J. GORLE, M.A. Fcp. 3s. 6d.
- FIVE LECTURES on the CHARACTER of ST. PAUL; being the Hulsean Lectures for 1862. By the Rev. J. S. Howson, D.D. Second Edition. 8vo. 9c.
- The LIFE and EPISTLES of ST. PAUL. By W. J. CONYBEARE, M.A. late Fellow of Trin. Coll. Cantab. and J. S. Howson, D.D. late Principal of Liverpool College.

LIBRARY EDITION, with all the Original Illustrations, Maps, Landscapes on Steel, Woodcuts, &c. 2 vols. 4to. 48s.

INTERMEDIATE EDITION, with a Selection of Maps, Plates, and Woodcuts. 2 vols. square crown 8vo. 31s. 6d.

PEOPLE'S EDITION, revised and condensed, with 46 Illustrations and Maps. 2 vols. crown 8vo. 12s.

The VOYAGE and SHIPWRECK of ST. PAUL; with Dissertations on the Ships and Navigation of the Ancients. By James Smith, F.R.S. Crown 8vo. Charts, 8s. 6d.

- FASTI SACRI, or a Key to the Chronology of the New Testament; comprising an Historical Harmony of the Four Gospels, and Chronological Tables generally from B.C. 70 to A.D. 70; with a Preliminary Dissertation on the Chronology of the New Testament, and other Aids to the elucidation of the subject. By THOMAS LEWIN, M.A. F.S.A. Imperial 8vo. 42s.
- A CRITICAL and GRAMMATICAL COMMENTARY on ST. PAUL'S Epistles. By C. J. Ellicott, D.D. Lord Bishop of Gloucester and Bristol. 8vo.

Galatians, Third Edition, 8s. 6d.

Ephesians, Third Edition, 8s. 6d.

Pastoral Epistles, Third Edition, 10s. 6d.

Philippians, Colossians, and Philemon, Third Edition, 10s. 6d.

Thessalonians, Second Edition, 7s. 6d.

- Historical Lectures on the Life of our Lord Jesus Christ: being the Hulsean Lectures for 1859. By the same Author. Fourth Edition. 8vo. price 10s. 6d.
- The Destiny of the Creature; and other Sermons preached before the University of Cambridge. By the same. Fourth Edition. Post 8vo. 5s.
- The Broad and the Narrow Way; Two Sermons preached before the University of Cambridge. By the same. Crown 8vo. 2s.
- Rev. T. H. HORNE'S INTRODUCTION to the CRITICAL STUDY and Knowledge of the Holy Scriptures. Eleventh Edition, corrected and extended under careful Editorial revision. With 4 Maps and 22 Woodcuts and Facsimiles. 4 vols. 8vo. £3 13s. 6d.
- Rev. T. H. Horne's Compendious Introduction to the Study of the Bible, being an Analysis of the larger work by the same Author. Re-edited by the Rev. JOHN AYRE, M.A. With Maps. &c. Post 8vo. 9s.
- The TREASURY of BIBLE KNOWLEDGE; being a Dictionary of the Books, Persons, Places, Events, and other matters of which mention is made in Holy Scripture: intended to establish its Authority and illustrate its Contents. By Rev. J. AYRE, M.A. With Maps, 16 Plates, and numerous Woodcuts. Fcp. 10s. 6d.
- The GREEK TESTAMENT; with Notes, Grammatical and Exegetical.
 By the Rev. W. WEBSTER, M.A. and the Rev. W. F. WILKINSON, M.A. 2
 vols. 8vo. £2 4x.

Vol. I. the Gospels and Acts, 20s.

Vol. II. the Epistles and Apocalypse, 24s.

- EVERY-DAY SCRIPTURE DIFFICULTIES explained and illustrated. By J. E. PRESCOTT, M.A. VOL. I. Matthew and Mark; Vol. II. Luke and John. 2 vols. 8vo. 9s. each.
- The PENTATEUCH and BOOK of JOSHUA CRITICALLY EXAMINED.

 By the Right Rev. J. W. COLENSO, D.D. Lord Bishop of Natal. People's Edition, in 1 vol. crown 8vo. 6s. or in 5 Parts, 1s. each.
- The PENTATEUCH and BOOK of JOSHUA CRITICALLY EXAMINED.

 By Prof. A. KUENEN, of Leyden. Translated from the Dutch, and edited with Notes, by J. W. COLENSO, D.D. Bishop of Natal. 8vo. 8s. 6d.
- The CHURCH and the WORLD: Essays on Questions of the Day. By Various Writers. Edited by the Rev. ORBY SHIPLEY, M.A. 8vo.

- The FORMATION of CHRISTENDOM. PART I. By T. W. Allies, 8vo. 12s.
- CHRISTENDOM'S DIVISIONS: a Philosophical Sketch of the Divisions of the Christian Family in East and West. By EDMUND S. FFOULKES, formerly Fellow and Tutor of Jesus Coll. Oxford. Post 8vo. 7s. 6d.
- Christendom's Divisions, Part II. Greeks and Latins, being a History of their Dissensions and Overtures for Peace down to the Reformation.

 By the same Author.

 [Neurly ready.]
- The LIFE of CHRIST: an Eclectic Gospel, from the Old and New Testaments, arranged on a New Principle, with Analytical Tables, &c. By CHARLES DE LA PRYME, M.A. Trin. Coll. Camb. Revised Edition, 8vo. 5s.
- The HIDDEN WISDOM of CHRIST and the KEY of KNOWLEDGE; or, History of the Apocrypha. By ERNEST DE BUNSEN. 2 vols. 8vo. 28s.
- ESSAYS on RELIGION and LITERATURE. Edited by the Most Rev. Archbishop Manning. 8vo. 10s. 6d.
- The TEMPORAL MISSION of the HOLY GHOST; or, Reason and Revelation. By the Most Rev. Archbishop Manning. Second Edition. Crown 8vo. 8s. 6d.
- ESSAYS and REVIEWS. By the Rev. W. Temple, D.D. the Rev. B. WILLIAMS, B.D. the Rev. B. POWELL, M.A. the Rev. H. B. WILSON, B.D. C. W. GOODWIN, M.A. the Rev. M. PATTISON, B.D. and the Rev. B. JOWETT, M.A. Twelfth Edition. Fep. 8vo. 5s.
- MOSHEIM'S ECCLESIASTICAL HISTORY. MURDOCK and SOAMES'S Translation and Notes, re-edited by the Rev. W. STUBBS, M.A. 3 vols. 8vo. 45s.
- BISHOP JEREMY TAYLOR'S ENTIRE WORKS: With Life by BISHOP HEBER. Revised and corrected by the Rev. C. P. EDEN, 10 vols. price £5 5s.
- PASSING THOUGHTS on RELIGION. By the Author of 'Amy Herbert.' New Edition. Fcp. 8vo. 5s.
- Thoughts for the Holy Week, for Young Persons. By the same Author. Third Edition. Fcp. 8vo. 2s.
- Night Lessons from Scripture. By the same Author. Second Edition. 32mo. 3s.
- Self-Examination before Confirmation. By the same Author. 32mo. price 1s. 6d.
- Readings for a Month Preparatory to Confirmation, from Writers of the Early and English Church. By the same. Pcp. 4s.
- Readings for Every Day in Lent, compiled from the Writings of Bishop JEREMY TAYLOR. By the same. Fcp. 5s.
- Preparation for the Holy Communion; the Devotions chiefly from the works of Jeremy Taylor. By the same. 32mo. 3s.
- MORNING CLOUDS. Second Edition. Fcp. 5s.
- PRINCIPLES of EDUCATION Drawn from Nature and Revelation, and applied to Female Education in the Upper Classes. By the same. 2 vols. fcp. 12s. 6d.

- The WIFE'S MANUAL; or, Prayers, Thoughts, and Songs on Several Occasions of a Matron's Life. By the Rev. W. CALVERT, M.A. Crown 8vo. price 10s. 6d.
- SPIRITUAL SONGS for the SUNDAYS and HOLIDAYS throughout the Year. By J.S.B. MONSELL, LL.D. Vicar of Egham. Fourth Edition. Fcp. 4s. 6d.
- The Beatitudes: Abasement before God; Sorrow for Sin; Meekness of Spirit; Desire for Holiness; Gentleness; Purity of Heart; the Peacemakers; Sufferings for Christ. By the same. Second Edition, fcp. 3s. 6d.
- LYRA DOMESTICA; Christian Songs for Domestic Edification.
 Translated from the Psaltery and Harp of C. J. P. SPITTA, and from other sources, by RICHARD MASSIE. FIRST and SECOND SERIES, fcp. 4s. 6d. each.
- LYRA SACRA; Hymns, Ancient and Modern, Odes and Fragments of Sacred Poetry. Edited by the Rev. B. W. SAVILE, M.A. Third Edition, enlarged and improved. Fcp. 5s.
- LYRA GERMANICA, translated from the German by Miss C. Winkworth. First Series, Hymns for the Sundays and Chief Festivals; Second Series, the Christian Life. Fep. 5s. each Series.
- Hymns from Lyra Germanica, 18mo. 1s.
- LYRA EUCHARISTICA; Hymns and Verses on the Holy Communion, Ancient and Modern: with other Poems. Edited by the Rev. Orby Ship-LEY, M.A. Second Edition. Fcp. 7s. 6d.
- Lyra Messianica; Hymns and Verses on the Life of Christ, Ancient and Modern; with other Poems. By the same Editor. Second Edition, altered and enlarged. Fcp. 7s. 8d.
- Lyra Mystica; Hymns and Verses on Sacred Subjects, Ancient and Modern. By the same Editor. Fcp. 7s. 6d.
- The CHORALE BOOK for ENGLAND; a complete Hymn-Book in accordance with the Services and Festivals of the Church of England; the Hymns translated by Miss C. Winkworth; the tunes arranged by Prof. W. S. Bennett and Otto Goldschmidt. Fep. 4to. 12s. 6d.
- Congregational Edition. Fcp. 2s.
- The CATHOLIC DOCTRINE of the ATONEMENT: an Historical Inquiry into its Development in the Church; with an Introduction on the Principle of Theological Developments. By H. N. OXENHAM, M.A. formerly Scholar of Balliol College, Oxford. 8vo. 8s. 6d.
- FROM SUNDAY TO SUNDAY: an attempt to consider familiarly the Weekday Life and Labours of a Country Clergyman. By R. GEE, M.A Vicar of Abbott's Langley and Rural Dean. Fcp. 5s.
- FIRST SUNDAYS at CHURCH; or, Familiar Conversations on the Morning and Evening Services of the Church of England. By J. E. RIDDLE, M.A. Fcp. 28.6d.
- The JUDGMENT of CONSCIENCE, and other Sermons. By RICHARD WHATELY, D.D. late Archbishop of Dublin. Crown 8vo. 4s. 6d.
- PALEY'S MORAL PHILOSOPHY, with Annotations. By RICHARD WHATELY, D.D. late Archbishop of Dublin. 8vo. 7s.

Travels, Voyages, &c.

- OUTLINE SKETCHES of the HIGH ALPS of DAUPHINÉ. By T. G. BONNEY, M.A. F.G.S. M.A.C. Fellow of St. John's Coll. Camb. With 13 Plates and a Coloured Map. Post 4to, 16s.
- ICE-CAVES of FRANCE and SWITZERLAND; a Narrative of Subterranean Exploration. By the Rev. G. F. BROWNE, M.A. Fellow and Assistant-Tutor of St. Catherine's Coll. Cambridge, M.A.C. With 11 Illustrations on Wood. Square crown 8vo. 12s. 6d.
- VILLAGE LIFE in SWITZERLAND. By SOPHIA D. DELMARD. Post 8vo. 9s. 6d.
- HOW WE SPENT the SUMMER; or, a Voyage en Zigzag in Switzerland and Tyrol with some Members of the ALPINE CLUB. From the Sketch-Book of one of the Party. Third Edition, re-drawn. In oblong 4to. with about 300 illustrations, 15s.
- BEATEN TRACKS; or, Pen and Pencil Sketches in Italy. By the Authoress of 'A Voyage en Zigzag.' With 42 Plates, containing about 200 Sketches from Drawings made on the Spot. 8vo. 16s.
- MAP of the CHAIN of MONT BLANC, from an actual Survey in 1863—1864. By A. ADAMS-REILLY, F.R.G.S. M.A.C. Published under the Authority of the Alpine Club. In Chromolithography on extra stout drawing-paper 28in. × 17in. price 10s. or mounted on canvas in a folding case, 12s. 6d.
- TRANSYLVANIA, its PRODUCTS and its PEOPLE. By CHARLES BONER. With 5 Maps and 43 Illustrations on Wood and in Chromolithography. 8vo. 21s.
- EXPLORATIONS in SOUTH WEST AFRICA, from Walvisch Bay to Lake Ngami and the Victoria Falls. By Thomas Baines, F.R.G.S. 8vo. with Map and Illustrations, 21s.
- VANCOUVER ISLAND and BRITISH COLUMBIA; their History, Resources, and Prospects. By MATTHEW MACFIE, F.R.G.S. With Maps and Illustrations. 8vo. 18s.
- HISTORY of DISCOVERY in our AUSTRALASIAN COLONIES, Australia, Tasmania, and New Zealand, from the Earliest Date to the Present Day. By WILLIAM HOWITT. With 3 Maps of the Recent Explorations from Official Sources. 2 vols. 8vo. 28s.
- The CAPITAL of the TYCOON; a Narrative of a Three Years' Residence in Japan. By Sir RUTHERFORD ALCOCK, K.C.B. 2 vols. 8vo. with numerous Illustrations, 42s.
- LAST WINTER in ROME. By C. R. WELD. With Portrait and Engravings on Wood. Post 8vo. 14s.
- AUTUMN RAMBLES in NORTH AFRICA. By JOHN ORMSBY, of the Middle Temple. With 16 Illustrations. Post 8vo. 8s. 6d.
- The DOLOMITE MOUNTAINS. Excursions through Tyrol, Carinthia, Carniola, and Friuli in 1861, 1862, and 1863. By J. GILBERT and G. C. CHUECHILL, F.R.G.S. With numerous Illustrations. Square crown 8vo. 21s.

- A SUMMER TOUR in the GRISONS and ITALIAN VALLEYS of the Bernina. By Mrs. HENRY FRESHFIELD. With 2 Coloured Maps and 4 Views. Post 8vo. 10s. 6d.
- Alpine Byeways; or, Light Leaves gathered in 1859 and 1860. By the same Authoress. Post 8vo. with Illustrations, 10s. 6d.
- A LADY'S TOUR ROUND MONTE ROSA; including Visits to the Italian Valleys. With Map and Illustrations. Post 8vo. 14s.
- GUIDE to the PYRENEES, for the use of Mountaineers. By CHARLES PACKE. With Maps, &c. and Appendix. Fcp. 6s.
- The ALPINE GUIDE. By JOHN BALL. M.R.I.A. late President of the Alpine Club. Post 8vo. with Maps and other Illustrations.
- Guide to the Eastern Alps, nearly ready.
- Guide to the Western Alps, including Mont Blanc, Monte Rosa, Zermatt. &c. 7s. 6d.
- Guide to the Oberland and all Switzerland, excepting the Neighbourhood of Monte Rosa and the Great St. Bernard; with Lombardy and the adjoining portion of Tyrol. 7s. 6d.
- A GUIDE to SPAIN. By H. O'SHEA. Post 8vo. with Travelling Map, 15s.
- CHRISTOPHER COLUMBUS; his Life, Voyages, and Discoveries. Revised Edition, with 4 Woodcuts. 18mo, 2s. 6d.
- CAPTAIN JAMES COOK; his Life, Voyages, and Discoveries. Revised Edition, with numerous Woodcuts. 18mo. 2s. 6d.
- HUMBOLDT'S TRAVELS and DISCOVERIES in SOUTH AMERICA.
 Third Edition, with numerous Woodcuts. 18mo. 2s. 6d.
- MUNGO PARK'S LIFE and TRAVELS in AFRICA, with an Account of his Death and the Substance of Later Discoveries. Sixth Edition, with Woodcuts. 18mo. 2s. 6d.
- NABRATIVES of SHIPWRECKS of the ROYAL NAVY between 1793 and 1857, compiled from Official Documents in the Admiralty by W. O. S. GILLY, with a Preface by W. S. GILLY, D.D. Third Edition, fop. 5s.
- A WEEK at the LAND'S END. By J. T. BLIGHT; assisted by E. H. RODD, R. Q. COUCH, and J. RALFS. With Map and 96 Woodcuts. Fep. price 6s. 6d.
- VISITS to REMARKABLE PLACES: Old Halls. Battle-Fields, and Scenes Illustrative of Striking Passages in English History and Poetry. By WILLIAM HOWITT. 2 vols. square crown 8vo. with Wood Engravings, price 25s.
- The RURAL LIFE of ENGLAND. By the same Author. With Woodcuts by Bewick and Williams. Medium 8vo. 12s. 6d.

Works of Fiction.

ATHERSTONE PRIORY. By L. N. Comyn. 2 vols. post 8vo. 21s. Ellice: a Tale. By the same Author. Post 8vo. 9s. 6d.

STORIES and TALES by the Author of 'Amy Herbert,' uniform Edition, each Tale or Story complete in a single Volume.

AMY HERBERT, 2s. 6d. GERTRUDE, 2s. 6d. EARL'S DAUGHTER, 2s. 6d. EXPERIENCE OF LIFE, 2s. 6d. CLEVE HALL. 3s. 6d.

IVORS, 3s. 6d.
KATHARINE ASHTON, 3s. 6d.
MARGARET PERCIVAL, 5s.
LANRTON PARSONAGE, 4s. 6d.
URSULA. 4s. 6d.

A Glimpse of the World. By the Author of 'Amy Herbert.' Fcp. 7s. 6d.

THE SIX SISTERS of the VALLEYS: an Historical Romance. By W. Bramley-Moore, M.A. Incumbent of Gerrard's Cross, Bucks. Third Edition, with 14 Illustrations. Crown 8vo. 5s.

The GLADIATORS: A Tale of Rome and Judea. By G. J. WHYTE MELVILLE. Crown 8vo. 5s.

Digby Grand, an Autobiography. By the same Author. 1 vol. 5s.

Kate Coventry, an Autobiography. By the same. 1 vol. 5s.

General Bounce, or the Lady and the Locusts. By the same. 1 vol. 5s.

Holmby House, a Tale of Old Northamptonshire. 1 vol. 5s.

Good for Nothing, or All Down Hill. By the same. 1 vol. 6s.

The Queen's Maries, a Romance of Holyrood, 1 vol. 6s.

The Interpreter, a Tale of the War. By the same. 1 vol. 5s.

TALES from GREEK MYTHOLOGY. By George W. Cox, M.A. late Scholar of Trin. Coll. Oxon. Second Edition. Square 16mo. 3s. 6d.

Tales of the Gods and Heroes. By the same Author, Second Edition, Fep. 5s.

Tales of Thebes and Argos. By the same Author. Fcp. 4s.6d.

BECKER'S GALLUS; or, Roman Scenes of the Time of Augustus:
with Notes and Excursuses illustrative of the Manners and Customs of the
Ancient Romans. New Edition.
[Nearly ready.

BECKER'S CHARICLES; a Tale illustrative of Private Life among the Ancient Greeks: with Notes and Excursuses. New Edition. [Nearly ready.

ICELANDIC LEGENDS. Collected by Jon Arnason. Selected and Translated from the Icelandic by G. E. J. Powell and E. Magnusson. Second Series, with Notes and an Introductory Essay on the Origin and Genius of the Icelandic Folk-Lore, and 3 Illustrations on Wood. Cr. 8vo. 21s.

The WARDEN: a Novel. By Anthony Trolloge. Crown 8vo. 3s. 6d.

Barchester Towers: a Sequel to 'The Warden.' By the same Author. Crown 8vo. 5s.

Poetry and The Drama.

GOETHE'S SECOND FAUST. Translated by JOHN ANSTER, LL.D. M.R.I.A. Regius Professor of Civil Law in the University of Dublin. Post 8yo. 15s.

- TASSO'S JERUSALEM DELIVERED. Translated into English Verse by Sir J. Kingston James, Kt. M.A. 2 vols. fcp. with Facsimile, 14s.
- POETICAL WORKS of JOHN EDMUND READE; with final Revision and Additions. 3 vols. fcp. 18s. or each vol. separately, 6s.
- MOORE'S POETICAL WORKS, Cheapest Editions complete in 1 vol. including the Autobiographical Prefaces and Author's last Notes, which are still copyright. Crown 8vo. ruby type, with Portrait, 6s. or People's Edition, in larger type, 12s. 6d.
- Moore's Poetical Works, as above, Library Edition, medium 8vo. with Portrait and Vignette, 14s. or in 10 vols. fcp. 3s. 6d. each.
- MOORE'S IRISH MELODIES, 32mo. Portrait, 1s. 16mo. Vignette, 2s.6d.
- Maclise's Edition of Moore's Irish Melodies, with 161 Steel Plates from Original Drawings. Super-royal 8vo. 31s. 6d.
- Maclise's Edition of Moore's Irish Melodies with all the Original Designs (as above) reduced by a New Process. Imp. 16mo. 10s. 6d.
- MOORE'S LALLA ROOKH. 32mo. Plate, 1s. 16mo. Vignette, 2s. 6d.
- Tenniel's Edition of Moore's Lalla Rookh, with 68 Wood Engravings from original Drawings and other Illustrations. Fcp. 4to. 21s.
- **SOUTHEY'S POETICAL WORKS**, with the Author's last Corrections and copyright Additions. Library Edition, in 1 vol. medium 8vo. with Portrait and Vignette, 14s. or in 10 vols. fcp. 3s. 6d. each.
- LAYS of ANCIENT ROME; with *Ivry* and the *Armada*. By the Right Hon. LORD MACAULAY. 16mo. 4s. 6d.
- Lord Macaulay's Lays of Ancient Rome. With 90 Illustrations on Wood, Original and from the Antique, from Drawings by G. SCHARF. Fcp. 4to, 21s.
- POEMS. By JEAN INGELOW. Tenth Edition. Fcp. 8vo. 5s.
- POETICAL WORKS of LETITIA ELIZABETH LANDON (L.E.L.) 2 vols. 16mo. 10s.
- PLAYTIME with the POETS: a Selection of the best English Poetry for the use of Children. By a LADY. Revised Edition. Crown 8vo. 5s.
- BOWDLER'S FAMILY SHAKSPEARE, cheaper Genuine Edition, complete in 1 vol. large type, with 36 Woodcut Illustrations, price 14s. or with the same ILLUSTRATIONS, in 6 pocket vols. 3s. 6d. each.
- ARUNDINES CAMI, sive Musarum Cantabrigiensium Lusus canori.
 Collegit atque edidit H. DRURY, M.A. Editio Sexta, curavit H. J. Hodgson,
 M.A. Crown 8vo. 7s. 6d.
- The ILIAD of HOMER TRANSLATED into BLANK VERSE. By ICHABOD CHARLES WRIGHT, M.A. late Fellow of Magd. Coll. Oxon. 2 vols. crown 8vo. 21s.
- The ILIAD of HOMER in ENGLISH HEXAMETER VERSE. By J. HENRY DART, M.A. of Exeter College, Oxford: Author of 'The Exile of St. Helena, Newdigate, 1838.' Square crown 8vo. 21s.

 $\mathsf{Digitized} \ \mathsf{by} \ Google$

DANTE'S DIVINE COMEDY, translated in English Terza Rima by JOHN DAYMAN, M.A. [With the Italian Text, after Brunetti, interpaged.] 8vo. 21s.

Rural Sports, &c.

- ENCYCLOPÆDIA of RURAL SPORTS; a complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, &c. By D. P. BLAINE. With above 600 Woodcuts (20 from Designs by JOHN LEECH). 8vo. 42s.
- NOTES on RIFLE SHOOTING. By Captain Hearon, Adjutant of the Third Manchester Rifle Volunteer Corps, Revised Edition. Fcp. 2s. 6d.
- COL. HAWKER'S INSTRUCTIONS to YOUNG SPORTSMEN in all that relates to Guns and Shooting. Revised by the Author's Son. Square crown 8vo, with Illustrations, 18s.
- The RIFLE, its THEORY and PRACTICE. By ARTHUR WALKER (79th Highlanders), Staff. Hythe and Fieetwood Schools of Musketry. Second Edition. Crown Svo. with 125 Woodcuts, 5s.
- The DEAD SHOT, or Sportsman's Complete Guide; a Treatise on the Use of the Gun. Dog-breakine. Pigeon-shooting, &c. By MARKSMAN. Revised Edition. Fep. 800, with Plates, 52.
- HINTS on SHOOTING, FISHING, &c. both on Sea and Land and in the Fresh and Saltwater Lochs of Scotland; being the Experiences of C. IDLE. Second Edition, revised. Fcp. 6s.
- The FLY-FISHER'S ENTOMOLOGY. By ALFRED RONALDS. With coloured Representations of the Natural and Artificial Insect. Sixth Edition; with 20 coloured Plates. 8vo. 14s.
- HANDBOOK of ANGLING: Teaching Fly-fishing, Trolling, Bottom-fishing, Salmon-fishing; with the Natural History of River Fish, and the best modes of Catching them. By EPHEMERA. Fcp. Woodcuts, 5s.
- The CRICKET FIELD; or the History and the Science of the Game of Cricket. By JAMES PYCROFT, B.A. Fourth Edition. Fcp. 5s.
- The Cricket Tutor; a Treatise exclusively Practical. By the same. 18no. 1s.
- Cricketana. By the same Author. With 7 Portraits. Fcp. 5s.
- The HORSE-TRAINER'S and SPORTMAN'S GUIDE: with Considerations on the Duties of Grooms, on Purchasing Blood Stock, and on Veterinary Examination. By DIGBY COLLINS. Post 8vo. 6s.
- The HORSE'S FOOT, and HOW to KEEP IT SOUND. By W. MILES, Esq. Ninth Edition, with Illustrations. Imperial 8vo. 12s. 6d.
- A Plain Treatise on Horse-Shoeing. By the same Author. Post 8vo. with Illustrations, 2s. 6d.
- Stables and Stable-Fittings. By the same. Imp. 8vo. with 13 Plates, 15s.
- Remarks on Horses' Teeth, addressed to Purchasers. By the same.
 Post 8vo. 1s. 6d.
- On DRILL and MANŒUVRES of CAVALRY, combined with Horse Artillery. By Major-Gen. MICHAEL W. SMITH, C.B. Commanding the Poonah Division of the Bombay Army. 8vo, 12s. 6d.

- BLAINE'S VETERINARY ART; a Treatise on the Anatomy, Physiology, and Curative Treatment of the Diseases of the Horse, Neat Cattle and Sheep. Seventh Edition, revised and enlarged by C. Steel, M.R.C.V.S.L. 8vo, with Plates and Woodcuts, 18s.
- The HORSE: with a Treatise on Draught. By WILLIAM YOUATT.

 New Edition, revised and enlarged. 8vo. with numerous Woodcuts, 10s. 6d.
- The Dog. By the same Author. 8vo. with numerous Woodcuts, 6s.
- The DOG in HEALTH and DISEASE. By STONEHENGE. With 70 Wood Engravings. Square crown 8vo. 15s.
- The Greyhound. By the same Author. Revised Edition, with 24 Portraits of Greyhounds. Square crown 8vo. 21s.
- The OX; his Diseases and their Treatment: with an Essay on Parturition in the Cow. By J. R. Dobson, M.R.C.V.S. Crown 8vo. with Illustrations. price 7s. 6d.

Commerce, Navigation, and Mercantile Affairs.

- PRACTICAL GUIDE for BRITISH SHIPMASTERS to UNITED States Ports. By PIERREPONT EDWARDS, Her Britannic Majesty's Vice-Consul at New York. Post 8vo. 8s. 6d.
- A NAUTICAL DICTIONARY, defining the Technical Language relative to the Building and Equipment of Sailing Vessels and Steamers, &c. By ARTHUR YOUNG. Second Edition; with Plates and 150 Woodcuts, 8vo. 18s.
- A DICTIONARY, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation. By J. R. M'CULLOCH, Esq. 8vo. with Maps and Plans, 50s.
- A MANUAL for NAVAL CADETS. By J. M'NEIL BOYD, late Captain R.N. Third Edition; with 240 Woodcuts and 11 coloured Plates. Post 8vo, 12s. 6d.
- The LAW of NATIONS Considered as Independent Political Communities. By TRAVERS TWISS, D.C.L. Regius Professor of Civil Law in the University of Oxford. 2 vols. 8vo. 30s. or separately, Part I. Peace, 12s. Part II. War, 18s.

Works of Utility and General Information.

- MODERN COOKERY for PRIVATE FAMILIES, reduced to a System of Easy Practice in a Series of carefully-tested Receipts. By ELIZA ACTON. Newly revised and enlarged; with 8 Plates, Figures, and 150 Woodcuts. Fcp. 7s. 6d.
- The HANDBOOK of DINING; or, Corpulency and Leanness scientifically considered. By BRILLAT-SAVARIN, Author of 'Physiologie du Goût.'
 Translated by L. F. SIMPSON. Revised Edition, with Additions. Fcp. 3s. 6d.
- On FOOD and its DIGESTION; an Introduction to Dictetics. By W. Beinton, M.D. Physician to St. Thomas's Hospital, &c. With 48 Woodcuts. Post 8vo. 12s.

- WINE, the VINE, and the CELLAR. By THOMAS G. SHAW. Second Edition, revised and enlarged, with Frontispiece and 31 Illustrations on Wood. 8vo. 16s.
- HOW TO BREW GOOD BEER: a complete Guide to the Art of Brewing Ale, Bitter Ale, Table Ale, Brown Stout, Porter, and Table Beer. By JOHN PITT. Revised Edition. Fcp. 4s. 6d.
- A PRACTICAL TREATISE on BREWING; with Formulæ for Public Brewers, and Instructions for Private Families. By W. BLACK. 8vo. 10s. 6d.
- SHORT WHIST. By Major A. Sixteenth Edition, revised, with an Essay on the Theory of the Modern Scientific Game by Prof. P. Fcp. 3s. 6d.
- WHIST, WHAT TO LEAD. By CAM. Third Edition. 32mo. 1s.
- HINTS on ETIQUETTE and the USAGES of SOCIETY; with a Glance at Bad Habits. Revised, with Additions, by a Lady of Rank. Fcp. price 2s. 6d.
- TWO HUNDRED CHESS PROBLEMS, composed by F. Healey, including the Problems to which the Prizes were awarded by the Committees of the Era, the Manchester, the Birmingham, and the Bristol Chess Problem Tournaments; accompanied by the Solutions. Crown 8vo. with 200 Diagrams, 5s.
- The CABINET LAWYER; a Popular Digest of the Laws of England, Civil and Criminal. Twenty-first Edition, extended by the Author; including the Acts of the Sessions 1864 and 1865. Fcp. 10s. 6d.
- The PHILOSOPHY of HEALTH; or, an Exposition of the Physiological and Sanitary Conditions conducive to Human Longevity and Happiness. By Southwood Smith, M.D. Eleventh Edition, revised and enlarged: with 113 Woodcuts, 8vo. 15s.
- HINTS to MOTHERS on the MANAGEMENT of their HEALTH during the Period of Pregnancy and in the Lying-in Room. By T. Bull, M.D. Fep. 5s.
- The Maternal Management of Children in Health and Disease. By the same Author. Fcp. 5s.
- The LAW RELATING to BENEFIT BUILDING SOCIETIES; with Practical Observations on the Act and all the Cases decided thereon; also a Form of Rules and Forms of Mortgages. By W. TIDD PRATT, Barrister. Second Edition. Fcp. 3s. 6d.
- NOTES on HOSPITALS. By FLORENCE NIGHTINGALE. Third Edition, enlarged; with 13 Plans. Post 4to. 18s.
- C. M. WILLICH'S POPULAR TABLES for ascertaining the Value of Lifehold, Leasehold, and Church Property, Renewal Fines, &c.; the Public Funds; Annual Average Price and Interest on Consols from 1731 to 1861; Chemical, Geographical, Astronomical, Trigonometrical Tables, &c. Post 8vo. 10s.
- THOMSON'S TABLES of INTEREST, at Three, Four, Four and a Hair, and Five per Cent. from One Pound to Ten Thousand and from 1 to 865 Days. 12mc. 3s. 6d.
- MAUNDER'S TREASURY of KNOWLEDGE and LIBRARY of Reference: comprising an English Dictionary and Grammar, Universal Gazetteer, Classical Dictionary, Chronology, Law Dictionary, a Synopsis of the Peerage, useful Tables, &c. Fcp. 10s.

INDEX.

ABBOTT on Sight and Touch	10	BROWNE's Ice Caves of France and Switzer-	15
Acton's Modern Cookery	27	land	22
ALCOCK's Residence in Japan	22	Exposition 39 Articles	18
ALLERS on Formation of Christendom		Pentateuch	18
Alpine Guide (The)		Buckle's History of Civilization	28
APJOHN'S Manual of the Metalloids ARAGO'S Biographies of Scientific Men	5	Bull's Hints to Mothers	28
Popular Astronomy	10	BUNSEN'S Ancient Egypt	20
ARNOLD's Manual of English Literature	7	Bunsan on Apoery pha	20
ARNOTT'S Elements of Physics	ıí	BURKE's Vicissitude of Families	- 5
Arundines Cami	25	BURTON's Christian Church	3
Atherstone Priory		Bonton a Chilleman Church	۰
Autumn holidays of a Country Parson	-8		
AYRE'S Treasury of Bible Knowledge		Cabinat Tarrer	
		Cabinet Lawyer Calvert's Wife's Manual	28
		CALVERT'S WHE S MANUAL	31
		Campaigner at Home	.8
D 1- Yl		Chorate Book for England	16
BACON'S ESSAYS, by WHATELY	5 5	CLough's Lives from Plutarch	21 2
— Life and Letters, by Spending Works	6	Colenso (Bishop) on Pentateuch and Book	-
Design the Emotions and Will	10	of Lushus	19
on the Senses and Intellect	10	of Joshua	26
on the Study of Character	10	Columbus's Voyages	23
BAINES's Explorations in S. W. Africa	22	Commonplace Philosopher in Town and	247
BALL's Alpine Guide	23	Country	8
BARNARD's Drawing from Nature	16	Conington's Handbook of Chemical Ana-	٠
BAYLDON'S Rents and Tillages	18	lysis	13
Beaten Tracks	23	lysis Contanseau's Pocket French and English	
Beaten TracksBECKER's Charicles and Gallus	34	Dictionary	8
BEETHOVEN'S Letters	4	Practical ditto	8
BENFEY'S Sanskrit Dictionary	8	Converge and Howson's Life and Epistles	
BERRY's Journals and Correspondence	4	of St. Paul	18
BLACK's Treatise on Brewing	28	Cook's Voyages	23
BLACKIEV and FRIEDLANDER's German and		COPLAND's Dictionary of Practical Medicine	15
English Dictionary	8	Abridgment of ditto	15
BLAINE'S Rural Sports	26	Cox's Tales of the Great Persian War	2
Veterinary Art	27	- Tales from Greek Mythology	24
BLIGHT's Week at the Land's End	23	Tales of the Gods and Heroes Tales of Thebes and Argos	24
Boase's Essay on Human Nature	9	Cresy's Encyclopædia of Civil Engineering	24
Bootн's Epigrams	9	Critical Essays of a Country Parson	17
Bo\кн's Transylvania	22	Crows's History of France	2
BONNEY'S Alps of Dauphine	22	Cussans's Grammar of Heraldry	16
Bourns on Screw Propeller	17	Cossess Chammas of Heraidity	10
BOURNE'S Catechism of the Steam Engine.	17		
	iż l	DART's Iliad of Homer	O.L
Handbook of Steam Engine Treatise on the Steam Engine	17	DAYMAN'S Dante's Divina Commedia	25 26
BOWDLER'S Family SHAKSPEARE	25	D'Ausiens's History of the Reformation in	20
Boyd's Manual for Naval Cadets	27	the time of CALVIN	2
BRAMLEY-MOORE'S SIX Sixters of the Valleys	24	Dead Shot (The), by MARKSMAN	26
BRANDE's Dictionary of Science, Literature.	- 1	DE LA RIVE'S Treatise on Electricity	II
and Art	13	DELMARD'S Village Life in Switzerland	22
BRAY's (C.) Education of the Feelings	10	DE LA PRYME'S Life of Christ	20
Philosophy of Necessity	10	Dr Morgan on Matter and Spirit	9
BRINTON on Food and Digestion	27	DE Tocqueville's Democracy in America	7
BRISTOW'S Glossary of Mineralogy	!!	Dosson on the Ox	27
BRODIE'S (Sir C. B.) Works	15	Duncan and Millard on Classification, &c.	
Autobiography Constitutional History	15	of the Idiotic	15
	2 !	DYER's City of Rome	2

DWARDS' Shipmaster's Guide	27	HUGHES'S (W.) Geography of British His-	
Clinents of Botany Cline, a Tale LLicorr's Broad and Narrow Way	15	tory	11
Illioe, a Tale	23	Manual of Geography	11
SLLICOTT's Broad and Narrow Way	19	HULLAH'S History of Modern Music Transition Musical Lectures	4
Commentary on Ephesians	19	Transition Musical Lectures	4
Destiny of the Creature	19		23
Lectures on Life of Christ	19	HOMPHERYS Sentiments of Snakspeare	16
Commentary on Galatians	19	HUTTON'S Studies in Parliament	21
Philipping &c	19	my mus from Lyra Germanica	••
Pastoral Epist Philippians, &c Thessalonians	19		
Essays and Reviews	20	Tealandia Tananda Casand Carlos	•
Essays and Reviews on Religion and Literature, edited	- 1	Icelandic Legends. Second Series IDLE'S Hints on Shooting	24 26
by Manning	20	INGRLOW'S Poems	26
	- 1	INGELOW B I OCHIB	_
	١		
Carra com on Tron Chinhuilding	17	Jameson's Legends of the Saints and Mar-	
FAIRBAIRN on Iron Shipbuilding	*/	tyra	16
Wrought Iron to Ruilding	17	Legends of the Madonna Legends of the Monastic Orders	16
Wrought Iron to Building Information for Engineers	17	I.egends of the Monastic Orders	16
Treatise on Mills & Millwork	17	JAMESON And EASTLAKE'S HISLORY OF OUR	
FARRAR's Chapters on Language	7	Lord Johns's Home Walks and Holiday Rambles Johnson's Patentee's Manual	10
Frontage's Christendom's Divisions	20	Johns's Home Walks and Holiday Rambles	11
FRESEFIELD's Alpine Byways	23	Johnson's Patentee's Manual	17
FRESHFIELD'S Alpine Byways	2.5	Fractical Draughtsman	17
Friends in Council Facuna's History of England	9	JOHNSTON'S GAZEtteer, or Geographical Dic-	11
FROUDE'S HISTORY OF England	1	tionary Jones's Christianity and Common Sense	ic
		Con-10 Community and Common Scano	•
•			
GARRATT'S Marvels and Mysteries of			
Instinct	12	Kalisch's Commentary on the Bible	- 3
GBE's Sunday to Sunday	21	Hebrew Grammar	.3
GILBERT and CHURCHILL'S Dolomite Moun-		Kesteven's Domestic Medicine	15
taine	22	Kurses on Pentateuch and Joshua	15
GILLY's Shipwrecks of the Navy	2:3	MUENER Off Pentarench and Joshus	13
GOSTRE'S Second Faust, by Anster GOODEVE'S Elements of Mechanism	24		
Goodsva's Elements of Mechanism	17		
Goule's Questions on BROWNE's Exposition	18	Lady's Tour Round Monte Rosa	2
of the 39 Articles. GRANT'S Ethics of Aristotle. Graver Thoughts of a Country Parson	10	Landon's (L. E. L.) Poetical Works	2
Graver Thoughts of a Country Parson	Ä	LATHAM'S English Dictionary LECKY'S History of Rationalism Leisure Hours in Town LEWES' History of Philosophy	- 1
Gray's Anatomy	14	Leisure House in Town	- 7
GRAY'S Anatomy	12	LEWES' History of Philosophy	•
Sponges and Animalculæ	12		19
GROVE ON Correlation of Physical Forces.	11	Lewis on Early Roman History	
Gwill's Encyclopædia of Architecture	16	- Essays on Administrations	- (
		- Fables of BABRIUS	- (
		- on Foreign Jurisdiction	- 9
Wandhash of Angline by Danies . '		on Irish Disturbances	•
Handbook of Angling, by Ephemera Hans on Election of Representatives	26 6	Politics	
Harrwie's Sea and its Living Wonders	12	Politics	- 7
Harmonias of Natura	10	on Political Terms Liddell and Scorr's Greek-English Lexicon	- 3
Tropical World	12	Abridged ditto	-
Tropical World HAUGHTON'S Manual of Geology HAWKER'S Instructions to Young Sportsmen	iī	Lite of Man Symbolised Lindley and Moore's Treasury of Borany	10
HAWKER'S Instructions to Young Sportsmen	26	LINDLEY and MOORE's Treasury of Borany	1
HEALEY'S Chess Problems HEATON'S Notes on Rifle Shooting	28	Longman's Lectures on the History of Eng-	
HEATON's Notes on Rifle Shooting	. 26	land	_ ;
Halps a Spanish Conquest in America	. 2	Loudon's Agriculture Cottage, Farm, Villa Architecture	1
HERSCHEL'S Essays from the Edinburgh	۱	Cortage, r arm, v ma Architecture	- !!
and Quarterly Reviews Outlines of Astronomy	. 13 . 10		- ;
		Plants Trees and Shrubs	- ;
Hints on Etiquette	. 28	Lowndes's Engineer's Handbook	i
Hupgson's Time and Space	. 10	Lyra Domes ica	ż
HOLLAND's Essays on Scientific Subjects	. iš	Eucharistica	2
HOLMES & System of Surgery	. 14	Eucharistics	i, Ż
HOOKER and Walken-Armott's British	1	Messianica	2
Flora	. 18	Mystica	2
HORNE'S Introduction to the Scriptures	. 19	——Sacra	2
Compendium of ditto	. [9		
Hoastey's Manual of Poisons	. 15	Manager Cond Cond	
Hoseves's Talpa. How we Spent the Summer	. 18	MACAULAY'S (Lord) Essays History of England Isys of Ancient Kome.	-
Howert's Australian Discovery	. 22 . 22	Lave of Ancient Rome	2
Howirr's Australian Discovery Rural Life of England	. 22 . 23	Miscellaneous Writings	-
Visits to Remarkable Places	. 24 . 23	Speeches	
U.manala (Imlanan Tantunan an Ot. Dan)		***	



MACDOUGALL's Theory of War	17 1	PACKE's Guide to the Pyrenees	23
McCulloca's Dictionary of Commerce Geographical Dictionary	27	PACER'S Guide to the Pyrenees PACER'S Life and Travels PARK'S Life and Travels PARKINA'S Life and Travels PARKINA'S Life and Of Materia Medica PARKINA'S Tuscan Sculptors PRILLIPS'S Guide to Geology.	14
Geographical Dictionary	īi l	Pany's life and Travels	
MACFIE's Vancouver Island	22	Dank & Life and Travels	23
MANUIRE's Life of Father Mathew		TERRITA S Elements of Materia Medica	15
MANUFER S LATE OF FREIER DIRENEW	4	Manual of Materia Medica	15
Rome and its Rulers	4	Perkins's Tuscan Sculptors	16
Maling's Indoor Gardener	18	PHILLIPS's Guide to Geology	îĭ
MANNING ON HOLD CHARLEST MANNING ON HOLD GROST. MARSHMAN'S Life of Havelock. MASSEV'S History of Eugland MASSINOBERD'S History of the Reformation. MAUNDER'S Biographical Treasury.	20	- Introduction to Min l-	**
MARSHMAN'S Life of Havelock	- 6	Piesse's Art of Perfumery Chemical, Natural, and Physical	11
Massar's History of England	ĭ	I IMAGE & Art of Perfumery	18
Mr	•	Unemical, Natural, and Physical	
MASSINGBERD'S HIStory of the Reformation	4	Magic	18
MAUNDER's Biographical Treasury	5	Pirt on Brewing. Playtime with the Poets Practicel Mechanic's Journal	28
	11	Playtime with the Posts	40
Historical Treasury Scientific and Literary Treasury Treasury of Knowledge Treasury of Natural History Hypsical Goography	3	Practical Mechanic's Journal	25
Spiontificand Literary Programme			17
Scientific and interary i reasury	13		28
- Treasury of Knowledge	28	FRESCOTT'S SCripture Difficulting	19
Treasury of Natural History	12	Pageron's Saturn	
MAURY'S Physical Geography	10	PROCTOR's Saturn PYCROFT's Course of English Reading	10
May's Constitutional History of Fugland	ĭ	Treating of English Results	7
Manager 12 Disks Cond		Cricket Field	26
MBLVILLE'S Digby Grand	24	Cricket Tutor	94
	24	Cricketana	26
Gladiators	24		20
Good for Nothing	21		
Holmby House	24	!	
Ilolmby House		D	
Interpreter	24	TURADE & POSTICAL WORKS	35
Kate Coventry	24	Recreations of a Country Parson	8
————Queen's Maries	24	READE'S Poetical Works Mecreations of a Country Parson REILE'S Map of Mont Blanc RIDLE'S First Sundays at Church RIVERS' Rose Amateur's Chirch	•
MENDELSSOHN'S Letters	- 4	Rippin's First Sundays at Church	- 7
MENZIES' Windsor Great Park	•	Demand Dans American & Church	21
MIRKZIES WINGSOF Great Park	18		13
Merivale's (H.) Historical Studies	2		9
(C.) Fall of the Roman Republic	3	Eclipse of Faith	9
Boyle Lectures	3	— Defence of ditto	
- Romans under the Empire	2	Essays from the Edinburgh Review	9
Manager of Empire		Essays Iron the Edinourgh Review	8
Miles on Horse's Foot and Horseshoeing on Horses' Teeth and Stables	26	Rookt's Thesaurus of English Words and	9
on Horses' Teeth and Stables	26	ROOKT'S Thesaurus of English Words and	_
MILL on Liberty	6	Phrases	7
on Representative Government	6	Royarm's Fly-Fisher's Enternals	
on Heilitarionism		Russman's Debates	26
36 On O cirical laulisin	6		7
MILL on Liberty on Representative Government on Utilitarianism MILL's Dissertations and Discussions Political recognity	6	Russell on Government and Constitution.	í
- I Official reconomy	6		
System of Logic			
System of Logic	6		
System of Logic	6	Sandars's Justinian's Institutes	_
System of Logic Hamilton's Philosophy MILLER's Elements of Chemistry	6 6 14	Sandars's Justinian's Institutes	
System of Logic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL's Spiritual Songs	6		5 13
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSELL'S Spiritual Songs Beatindes Beatindes	6 6 14 21	Scrope on Volcanos	11
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14	Scrope on Volcanos	11
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14 21 21	Scrope on Volcanos Senior's Essays Senior's Amy Herbert	11
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14 21 21	Scrope on Volcanos Senore on Volcanos Senore's Essays Sewell's Amy Herbert	11 3 24
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14 21 21 21 25 25	Scrope on Volcanos Senore on Volcanos Senore's Essays Sewell's Amy Herbert	11 3 24
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14 21 21 25 25 25	Scrope on Volcanos Senore on Volcanos Senore's Essays Sewell's Amy Herbert	11 3 24
System of Logic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSEL'S Spiritual Songs Beatitudes	6 6 14 21 21 21 25 25	Scrope on Volcanos Sanos o Sanos on Volumetrical Analysis Scrope on Volcanos Sanos o Sanos S	11 24 24 24
System of Locic Hamilton's Philosophy MILLER'S Elements of Chemistry MONSELL'S Spiritual Songs Bestitudes MONTHORNER OF Pregnancy MONOR'S I Fish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology	6 6 14 21 21 25 25 25	SCROPE ON VOICEMENT STREET STR	11 24 24 24 24 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTONERS OF Preznancy MONTONERS OF Preznancy Lalla Rookh Journal and Correspondence Poetical Works MONEL's Elements of Psychology	6 6 14 21 21 25 25 25 25	SCROPE ON VOICEMENT STREET STR	11 24 24 24 24 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTONERS OF Preznancy MONTONERS OF Preznancy Lalla Rookh Journal and Correspondence Poetical Works MONEL's Elements of Psychology	6 6 14 21 21 25 25 25 25	SCROPE ON VOICEMENT STREET STR	11 24 24 24 24 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTONERS OF Preznancy MONTONERS OF Preznancy Lalla Rookh Journal and Correspondence Poetical Works MONEL's Elements of Psychology	6 6 14 21 21 25 25 25 25	SCROPE ON VOICEMENT STREET STR	11 24 24 24 24 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLE, Spiritual Songe Beatitudes MONTHON STATE OF THE STATE OF	6 6 14 21 21 25 25 5 25 9 9 20 20	Scrope on Volcanos Senors on Vol	11 34 34 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT ON PERSONAL MONTOMENT ON PERSONAL Lalla Rookh Journal and Correspondence Lalla Rookh MONELL'S Stella Rookh MONELL'S Coude MONELL'S Stella Rookh MONE	6 6 14 21 21 25 25 25 25	Scrope on Volcanos Senors on Vol	11 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLA's Spiritual Songe Beatitudes MONTHONE SYSTEM SONGE MORN'S I rish Melodics Lalla Rookh Journal and Correspondence Poetical Works. MONELL's Elements of Psychology Morning Clouds MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Lotters.	6 6 14 21 21 25 25 5 25 9 9 20 20	SCROPE OF VOICEMOSE SERVICE STATEMENT OF STATEMENT OF SEASY SERVICE STATEMENT OF ST	11 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLA's Spiritual Songe Beatitudes MONTHONE SYSTEM SONGE MORN'S I rish Melodics Lalla Rookh Journal and Correspondence Poetical Works. MONELL's Elements of Psychology Morning Clouds MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Ecclesiastical History MONERIA'S Lotters.	6 6 14 21 21 25 25 5 25 9 9 20 20 4	Scrope on Volcanos Senors on Volcanos Senors on Volcanos Senors' Essays Sewerl's Amy Herbert Cleve Hall Ezarl's Daughter Examination for Confirmation Experience of Life Gertrude Gimpse of the World History of the Early Church Ivors Laueton Parsympse	11 24 24 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLA'S Spiritual Songe Beatitudes MONTHONE SONGE	6 6 14 21 21 25 25 5 25 9 9 20 20	SCROPE OF VOIGENOES ANALYSIS SCROPE OF VOICENOES SENDON'S ESSAYS SENDENCE SENDING SENDENCE SENDING SENDENCE SENDING SE	11 24 24 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLA'S Spiritual Songe Beatitudes MONTHONE STATE STATE STATE MONTHONE STATE Jalla Rookh Journal and Correspondence Poetical Works. MONELL's Elements of Psychology Mental Philosophy MONSHIM'S Ecclesiastical History MONSHIM'S Ecclesiastical History MONSHIM'S Ecclesiastical History MONSHIM'S Ecclesiastical History MONSHIM'S Colesiastical Histo	6 6 14 21 21 25 25 25 25 20 20 4	Scrope on Wolcanos Scrope on Wolcanos Scrope on Wolcanos Sawell & Sawell Anny Herbert Clove Hall Earl's Daughter Examination for Confirmation Experience of Life. Gertrude Glimpse of the World History of the Early Church Ivors. Katharine Ashton Laneton Parsonage. Margaret Perival	11 24 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMEN VON PERMANDE MORE I rish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONELL's Elements of Psychology MONTOMEN Spiritude MONTH Philosophy MONTH Spiritude	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope on Wolcanos Scrope on Wolcanos Scrope on Wolcanos Sawell & Sawell Anny Herbert Clove Hall Earl's Daughter Examination for Confirmation Experience of Life. Gertrude Glimpse of the World History of the Early Church Ivors. Katharine Ashton Laneton Parsonage. Margaret Perival	11 24 24 24 24 24 24 24 24 24
System of Loric Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLAE Spiritual Songes Bentitudes MONTHOUSE Spiritual Songes MONTHOUSE SPIRING SONGES MONTHOUSE SPIRING SONGES Jalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Colesiastical HISTOR	6 6 14 21 21 25 25 25 25 20 20 4	Scrope on Wolcanos Scrope on Wolcanos Scrope on Wolcanos Sawell & Sawell Anny Herbert Clove Hall Earl's Daughter Examination for Confirmation Experience of Life. Gertrude Glimpse of the World History of the Early Church Ivors. Katharine Ashton Laneton Parsonage. Margaret Perival	11 24 24 24 24 24 24 24 24 24
System of Loric Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLAE Spiritual Songes Bentitudes MONTHOUSE Spiritual Songes MONTHOUSE SPIRING SONGES MONTHOUSE SPIRING SONGES Jalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Colesiastical HISTOR	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope on Wolcanos Scrope on Wolcanos Scrope on Wolcanos Sawell & Esse Sawell & Any Herbert Cleve Hall. — Earl's Daughter — Examination for Confirmation — Experience of Life. — Gertrude — Glimpse of the World — History of the Early Church — Ivors. — Katharine Ashton — Laneton Parsonage. — Margaret Perival — Sight Lessons from Scripture — Penaratin oughts on Religion.	11 24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMEN VON PERMANDE MORE I rish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONELL's Elements of Psychology MONTOMEN Spiritude MONTH Philosophy MONTH Spiritude	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope of Volumetrical Analysis Scrope of Volumos Sanora Sasys Sanora Sasys Savatt's Amy Herbert Cive Hall. Earl's Daughter. Examination for Confirmation Experience of Life. Gertrude of Life. Gilmpse of the World History of the Early Church. Iorn. Iorn. Katharine Ashton Lameton Parsonage. Jurgen Percival Might a Communion Preparation of Communion Preparation of Communion	11 24 24 24 24 24 24 24 24 24
System of Loric Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLAE Spiritual Songes Bentitudes MONTHOUSE Spiritual Songes MONTHOUSE SPIRING SONGES MONTHOUSE SPIRING SONGES Jalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Colesiastical HISTOR	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope on Volumetrical Analysis Scrope on Volumetrical Analysis Scrope on Volcanos Sawera. A per Herber Earl's Daughter Earl's Daughter Experience of Life. Gertrude Glimpse of the World History of the Early Church Ivors. Katharine Ashton Laneton Parsonage. Margaret Perival Night Lessons from Scripture Passing Thoughts on Religion Freparation for Communicon	24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Loric Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLAE Spiritual Songes Bentitudes MONTHOUSE Spiritual Songes MONTHOUSE SPIRING SONGES MONTHOUSE SPIRING SONGES Jalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Colesiastical HISTOR	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope on Volcanos Senora Or Volcanos Senora Or Volcanos Senora Seasys Senora Or Volcanos Senora Senora Or Volcanos Senora Senora Or Volcanos Senora Or Volcanos Senora Or Volcanos Senora Or Volcanos Senora Or Senora Or Confirmation Experience of Life Gertrude Gertrude Gimpse of the World History of the Early Church Ivora. Ivora. Ivora. Instituto Parsonage Jargaret Percival Night Lessons from Scripture Passing Thoughts on Religion Peparation for Communica Principles of Education Readings for Confirmation	24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Loric Hamilton's Philosophy MILLER's Elements of Chemistry MONSBLAE Spiritual Songes Bentitudes MONTHOUSE Spiritual Songes MONTHOUSE SPIRING SONGES MONTHOUSE SPIRING SONGES Jalla Rookh Journal and Correspondence Poetical Works MONELL's Elements of Psychology Morning Clouds MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Ecclesiastical History MONSBLW'S Colesiastical HISTOR	6 6 14 21 21 25 25 25 25 20 20 20 4	Scrope on Volcanos Senora Or Volcanos Senora Or Volcanos Senora Seasys Senora Or Volcanos Senora Senora Or Volcanos Senora Senora Or Volcanos Senora Or Volcanos Senora Or Volcanos Senora Or Volcanos Senora Or Senora Or Confirmation Experience of Life Gertrude Gertrude Gimpse of the World History of the Early Church Ivora. Ivora. Ivora. Instituto Parsonage Jargaret Percival Night Lessons from Scripture Passing Thoughts on Religion Peparation for Communica Principles of Education Readings for Confirmation	24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTHOMER'S PRICE STATE ST	6 6 14 21 21 25 25 25 25 20 20 4	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Saron's Essays Sawall's Sany Herbert Cleve Hall Earl's Daughter Examination for Confirmation Experience of Life Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Percival Night Lessons from Scripture Passing Thoughts on Religion Preparation for Communion Principles of Education Headings for Confirmation Headings for Lent Stories and Tales Stories and Tales	24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE Lalla Rookh Journal and Correspondence Poetical Works MONTING Contail Philosophy MONTING Contail Philosophy MONTING CONTAIL OF PRINCIPLE MONTING CONTAIL OF PRINCIPLE MONTING (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures of Ancient MUREN'S Language and Literature of Greece MUREN'S Language and Literature of Greece New Testament, Illustrated with Wood En	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Saron's Essays Sawall's Sany Herbert Cleve Hall Earl's Daughter Examination for Confirmation Experience of Life Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Percival Night Lessons from Scripture Passing Thoughts on Religion Preparation for Communion Principles of Education Headings for Confirmation Headings for Lent Stories and Tales Stories and Tales	24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE Lalla Rookh Journal and Correspondence Poetical Works MONTING Contail Philosophy MONTING Contail Philosophy MONTING CONTAIL OF PRINCIPLE MONTING CONTAIL OF PRINCIPLE MONTING (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures of Ancient MUREN'S Language and Literature of Greece MUREN'S Language and Literature of Greece New Testament, Illustrated with Wood En	6 6 14 21 21 25 25 25 25 20 20 4	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Saron's Essays Sawall's Sany Herbert Cleve Hall Earl's Daughter Examination for Confirmation Experience of Life Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Percival Night Lessons from Scripture Passing Thoughts on Religion Preparation for Communion Principles of Education Headings for Confirmation Headings for Lent Stories and Tales Stories and Tales	24 24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 24 24 24 24 24 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCESS MONT	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Saron's Essays Sawall's Sany Herbert Cleve Hall Earl's Daughter Examination for Confirmation Experience of Life Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Percival Night Lessons from Scripture Passing Thoughts on Religion Preparation for Communion Principles of Education Headings for Confirmation Headings for Lent Stories and Tales Stories and Tales	24 24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 20 20 20 24 24 24 24 24 24 24 24 24 24 24 24 24
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCESS MONT	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2 15	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Saron's Essays Sawall's Sany Herbert Cleve Hall Earl's Daughter Examination for Confirmation Experience of Life Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Percival Night Lessons from Scripture Passing Thoughts on Religion Preparation for Communion Principles of Education Headings for Confirmation Headings for Lent Stories and Tales Stories and Tales	24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 24 24 24 24 26 26 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE MONTOMENT OF PRINCIPLE Lalla Rookh Journal and Correspondence Poetical Works MONTING Contail Philosophy MONTING Contail Philosophy MONTING CONTAIL OF PRINCIPLE MONTING CONTAIL OF PRINCIPLE MONTING (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures on the Science of Language MUREN'S (MAX) Lectures of Ancient MUREN'S Language and Literature of Greece MUREN'S Language and Literature of Greece New Testament, Illustrated with Wood En	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2 15	Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Scrope of Volumetrical Analysis Sanalysis Sanalysi	24 24 24 24 24 24 24 24 24 20 20 20 20 20 24 26 26 26 26 27 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCESS MONT	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2 15	Scrope on Volcanos Benors on Volcanos Benors a Sasya Benors Sasya Sawell's Amy Herbert Experience Experience of Life. Gertrude Gertrude Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Pereival Night Lessons from Scripture Passing Thoughts on Religion Principles of Education Readings for Confirmation Readings for Inta	24 24 24 24 24 24 24 24 24 20 20 20 20 24 28 6 19
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCESS MONT	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2 15	Scrope on Volcanos Benors on Volcanos Benors a Sasya Benors Sasya Sawell's Amy Herbert Experience Experience of Life. Gertrude Gertrude Gertrude Glimpse of the World History of the Early Church Ivors Katharine Ashton Laneton Parsonage Margaret Pereival Night Lessons from Scripture Passing Thoughts on Religion Principles of Education Readings for Confirmation Readings for Inta	11 3 24 24 24 24 24 24 24 24 24 24 20 20 20 20 20 21 28 6 19 28
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCIPLE MONTH OF PRINCIPLE MURCH OF PRINCIPLE MURC	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 7 2 14 2 15	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 20 20 20 20 24 28 6 19
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTOMENT OF PRINCIPLE MONTH OF PRINCIPLE MURCH OF PRINCIPLE MURC	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 2 14 2 28	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 24 24 24 26 20 20 20 20 20 20 21 22 23 24 24 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTHOMER'S PRICE STATE ST	6 6 6 14 21 21 25 5 5 5 9 9 20 20 4 7 7 2 14 2 28 14	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 20 20 20 20 20 21 22 24 24 26 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONSELL'S Spiritual Songs MONTOMEN OF PRINCE Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology MONTHIS COURTS MURE SCHOOL COURTS MURE SCHOOL COURTS MURE SLANGUAGE AND LITERATURE OF Greece MURE SLANGUAGE MONTH SLA	6 6 14 21 21 25 5 5 25 9 9 20 20 4 7 2 14 2 28	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 21 28 61 28 32 42 42 42 42 42 42 42 42 42 42 42 42 42
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTHOMER OF PROPER OF STATES MONTHOMER OF STATES MONTHOMER OF STATES Lalla Rookh Journal and Correspondence Poetical Works MONTHOMER OF SYSTEM MONTHOMER OF STATES MONTH OF STATES MURAL'S Elements of Process MURAL'S Elements of Brown MURAL'S Elements of Process MURAL'S Elements of Brown MURAL'S Elements of States MURAL'S Elements of Brown MURAL'S A STATES MURAL'S MONTH OF STATES NEWMAN'S History of his Religious Opinions NIGHTINGALE'S NOTES ON HOSPITALS MURAL'S Animal Chemistry MURAL'S Animal Chemistry MURAL'S Chemistry MURAL'S CHEMISTRY MURAL'S Animal Chemistry MURAL'S Animal Chemistry MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S ANIMAL CHEMISTRY MURAL'S	6 6 6 14 21 21 25 5 5 5 9 9 20 20 4 7 7 2 14 2 28 14	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 26 20 20 20 20 20 21 28 61 28 28 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONSELL'S Spiritual Songs MONTOMEN OF PROPERTY MOORE'S Irish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology Morning Clouds MONTHING CHARLES SEED OF STANDARD OF THE MONTH PROPERTY MONTHING CHARLES SEED OF THE MONTH OF THE MONTH PROPERTY OF THE MONTH OF TH	66 614 21 21 22 25 5 25 5 25 20 20 4 7 2 14 2 28	Scrope on Notions of Volumetrical Analysis Scrope on Volcanos Senora Seasya Senora Or Volcanos Senora Seasya Senora Or Volcanos Senora Or Senora	24 24 24 24 24 24 24 24 24 20 20 20 20 20 20 21 28 61 28 32 42 42 42 42 42 42 42 42 42 42 42 42 42
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONSELL'S Spiritual Songs MONTOMEN OF PROPERTY MOORE'S Irish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology Morning Clouds MONTHING CHARLES SEED OF STANDARD OF THE MONTH PROPERTY MONTHING CHARLES SEED OF THE MONTH OF THE MONTH PROPERTY OF THE MONTH OF TH	6 6 14 21 21 25 5 5 25 9 9 20 20 4 4 7 7 2 14 2 28 14 14 14 12 2	Scrope on Volcanos Benors on Volcanos Benors a Sasya Benors Sasya Sawell's Amy Herbert Experience of Life. Experience of Life. Gertrude of Life. History of the Early Church. Laneton Parsonage. Margaret Pereival Night Lessons from Scripture Passing Thoughts on Religion Principles of Education Readings for Confirmation. Headings for Lent Stories and Tales Thoughts for the Holy Week Ursula Saroban's Elements of Logic Saroban's Elements of Logic Saroban's Church and the World Simpson's Handbook of Dining Sinyasing's (Abella) Life, by Winkwoath Sinyasing's (Abell	24 24 24 24 24 24 24 24 24 26 20 20 20 20 20 21 28 61 28 28 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONSELL'S Spiritual Songs MONTOMEN OF PROPERTY MOORE'S Irish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology Morning Clouds MONTHING CHARLES SEED OF STANDARD OF THE MONTH PROPERTY MONTHING CHARLES SEED OF THE MONTH OF THE MONTH PROPERTY OF THE MONTH OF TH	66 614 21 21 22 25 5 25 5 25 20 20 4 7 2 14 2 28	Scrope on Volcanoes Scrope on Volcanoes Serope on Volcanoes Sewella Seasy Sewella Seasy Sewella Clove Hall. Earl's Daughter Examination for Confirmation Experience of Life. Gertrude Glimpse of the World History of the Early Church Ivors. Katharine Ashton Laneton Parsonage. Margaret Prerival Night Lessons from Scripture Passing Thoughts on Religion Freparation for Communion Frinciples of Education Redings of Confirmation. Redings of Confirmation. Redings of Confirmation. Strope of Confirmation Shaw's Work on Wine Shaw's Work on Wine Shaw's Church and the World Short Whist Short's Church History Simpson's Handbook of Dining	24 24 24 24 24 24 24 24 24 24 24 26 20 20 20 20 20 24 24 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONSELL'S Spiritual Songs MONTOMEN OF PROPERTY MOORE'S Irish Melodies Lalla Rookh Journal and Correspondence Poetical Works MONELL'S Elements of Psychology Morning Clouds MONTHING CHARLES SEED OF STANDARD OF THE MONTH PROPERTY MONTHING CHARLES SEED OF THE MONTH OF THE MONTH PROPERTY OF THE MONTH OF TH	66 14 21 21 22 25 25 25 25 20 4 7 20 4 21 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 24 14 24 14 24 14 24 14 24 14 24 14 24 14 24 14 14 14 14 14 14 14 14 14 14 14 14 14	Scrope on Volcanos Benors on Volcanos Benors a Sasya Benors Sasya Sawell's Amy Herbert Experience of Life. Experience of Life. Gertrude of Life. History of the Early Church. Laneton Parsonage. Margaret Pereival Night Lessons from Scripture Passing Thoughts on Religion Principles of Education Readings for Confirmation. Headings for Lent Stories and Tales Thoughts for the Holy Week Ursula Surpens Elements of Logic Sardors Elements of Logic Sardors Elements of Logic Sardors Church and the World Scorn Whist Simple of Health Simple of Health Simple of Health G.) Paul's Voyage and Shipwreck G.) Wesleyan Method Shipwreck (Synney) Memoir and Letters Workellancous Worke	24 24 24 24 24 24 24 24 24 25 26 29 28 34 27 28 34 25 26 29 29 29 29 29 29 29 29 29 29 29 29 29
System of Locic Hamilton's Philosophy MILLER's Elements of Chemistry MONSELL'S Spiritual Songs Beatitudes MONTHOMER OF PROPER OF STATES MONTHOMER OF STATES MONTHOMER OF STATES Lalla Rookh Journal and Correspondence Poetical Works MONTHOMER OF SYSTEM MONTHOMER OF STATES MONTH OF STATES MURAL'S Elements of Process MURAL'S Elements of Brown MURAL'S Elements of Process MURAL'S Elements of Brown MURAL'S Elements of States MURAL'S Elements of Brown MURAL'S A STATES MURAL'S MONTH OF STATES NEWMAN'S History of his Religious Opinions NIGHTINGALE'S NOTES ON HOSPITALS MURAL'S Animal Chemistry MURAL'S Animal Chemistry MURAL'S Chemistry MURAL'S CHEMISTRY MURAL'S Animal Chemistry MURAL'S Animal Chemistry MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S CHEMISTRY MURAL'S ANIMAL CHEMISTRY MURAL'S	6 6 14 21 21 25 5 5 25 9 9 20 20 4 4 7 7 2 14 2 28 14 14 14 12 2	Scrope on Volcanos Benors on Volcanos Benors a Sasya Benors Sasya Sawell's Amy Herbert Experience of Life. Experience of Life. Gertrude of Life. History of the Early Church. Laneton Parsonage. Margaret Pereival Night Lessons from Scripture Passing Thoughts on Religion Principles of Education Readings for Confirmation. Headings for Lent Stories and Tales Thoughts for the Holy Week Ursula Saroban's Elements of Logic Saroban's Elements of Logic Saroban's Church and the World Simpson's Handbook of Dining Sinyasing's (Abella) Life, by Winkwoath Sinyasing's (Abell	24 24 24 24 24 24 24 24 24 25 26 29 28 34 27 28 34 25 26 29 29 29 29 29 29 29 29 29 29 29 29 29

SMITH OR CAVAITY Drill and Manœuvres SOUTHEN'S (DOCTOT) POPTION POPTION STANLEN'S History of British Birds STERBING'S ANAlysis of Mill's Logic. STEPPEN'S Essays in Ecclesiastical Bio-	26 7 25 12 6	WALKER on the Rifle WATEON'S Principles and Practice of Physic WATES'S Dictionary of Chemistry WARDS'S Objects for Common Telescopes WEBSTER & WILKINSON'S Greek Testament WELD'S Last Winter in Rome.	3
graphy. Lectures on History of France. STIBLING'S Secret of Hegel STOREBENGS On the Dog on the Greyhound. SPEANGE ON Sea Air on Restoration of Health	5 2 10 27 27 15 15	WELLINGTON'S Life, by BRIALMONT and GLRIG by GLRIG WEST ON Children's Diseases. WHATELY'S English Synonymes Logic Remains	,
Tasso's Jerusalem, by James Tayton's (Jeremy) Works, edited by EDEN TENNENT'S Ceylon Natural History of Ceylon	25 20 12	Rhetoric Sermons Paley's Moral Philosophy WHEWRIL'S History of the Inductive Sciences Scientific Ideas	2
THIRLWALL'S History of Greece THOMSON'S (Archbishop) Laws of Thought —(J.) Tables of Interest —	2 6 28 15	White and Riddle's Latin-English Dictionaries. Wilserforce (W.) Recollections of by	2
and Bowman's Anatomy and Physiology of Man TROLLOGE'S Barchester Towers	14 15 24	HARFORD. WILLIGH'S Popular Tables WILSON'S Bryologia Britannica. WINDHAM'S DISTY WOOD'S HOMES without Hands.	1
Twiss's Law of Nations	24 27 11	Woodward's Historical and Chronological Encyclopædia Wright's Homer's Iliad	
Unz's Dictionary of Arts, Manufactures, and Mines	17		
VAUGHAN'S (R.) Revolutions in English History	12 1 10 10	YONGE'S English-Greek Lexicon Abridged ditto YOUNG'S Nautical Dictionary YOUATT on the Dog on the Horse	2

104

POTTEWAADE AND AA DRINTEDS NEW DEDVERAANIED TANKA

PRESERVATION SERVICE

SHELFMARK 7006 CC 30

THIS BOOK HAS BEEN
MICROFILMED ()

MICROFILM NO 102429 PB Mic C



