An investigation of the theories of the natural history of man by Lawrence, Prichard, and others : founded upon animal analogies : and an outline of a new natural history of man : founded upon history, anatomy, physiology and human analogies / by William Frederick Van Amringe.

Contributors

Van Amringe, William Frederick, 1791-1873.
National Library of Medicine (U.S.)

Publication/Creation

New York : Baker & Scribner, 1848.

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The following Commendations of this Work are selected from a number of similar import.

Extract of a letter from Samuel George Morton, M. D., author of Crania Americania, Crania Ægyptiaca, &c. &c.

"I have only had time for a partial perusal of your work; but so far as I have gone it has afforded me great pleasure and instruction; and I am free to say that I regard it as a most valuable contribution to the important, but hitherto much neglected science of Ethnology. With many thanks for your admirable volume, I remain," &c.

From R. M. Huston, M. D., Professor of Materia Medica, &c. in the Jefferson Medical College, President of Medical Society, &c.

"I have found your Natural History of Man a very interesting volume. Notwithstanding all that has been written by others on this interesting subject, you have found room for much originality on many points; and although you differ widely from all of your predecessors in many respects, your reasons for so doing appear to me generally conclusive. What will be most acceptable, to Christians at least, is the constant agreement which is maintained between the philosophy of the subject and the Revelations of Scripture."

From the Hon. John C. Calhoun, LL. D., U. S. S.

"The subject is one of great importance, and I have read your volume with much interest. Your views are in several respects new to me; and while I am not prepared to yield my assent to all of them, I think that you have made out your main point, that the race consists of different species, by very strong, if not perfectly conclusive arguments. The work, in my opinion, well deserves the patronage of the publick, and I hope it will receive it."

From the Hon. Thomas H. Benton, LL. D., U. S. S.

"It gives me pleasure to say that your most acceptable offering, the volume of the Natural History of Man, was duly received. There is deep philosophy in it, and the subject is worthy of our most profound study. You have performed a double task,—studied it yourself, and enabled others to study it; and I shall very happily avail myself of your labors to enlighten myself upon it."

From the Medical Examiner and Record of Medical Science for July 1848.

"We will conclude by stating that the volume is crowded with a multitude of details, drawn from a vast range of human knowledge, and is eminently suggestive of curious speculations. Morally its highest usefulness will, probably, be found in its tendency to fix attention upon the very wide and durable,—perhaps perdurable,—distinctions actually existing between the races of men; and were the same class of researches cautiously pursued, through the national varieties, and even sub-varieties of humanity, great practical benefits might result in matters of government, morals, and benevolence," &c.

From the New York Evangelist, for March 30, 1848.

"The tone of moral feeling, and the reverence expressed for the Scriptures, are such as to commend the work; while no reader can fail to gather a great deal of the most valuable and interesting information from its pages."

AN INVESTIGATION

OF THE

THEORIES

OF THE

NATURAL HISTORY OF MAN,

BY

LAWRENCE PRICHARD, AND OTHERS.

FOUNDED UPON

ANIMAL ANALOGIES:

AND

AN OUTLINE

OF A

NEW NATURAL HISTORY OF MAN,

FOUNDED UPON

HISTORY, ANATOMY, PHYSIOLOGY,

AND

HUMAN ANALOGIES.

BY

WILLIAM FREDERICK VAN AMRINGE.

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New York:

PUBLISHED BY BAKER & SCRIBNER,

145 Nassau Street and 46 Park Row.

1848.

Entered according to Act of Congress, in the year 1848,
BY WILLIAM FREDERICK VAN AMRINGE,
In the Clerk's Office of the District Court of the United States, for the Southern District of New York.

GN
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1848

S. W. BENEDICT, Printer,
16 Spruce Street.

DEDICATION.

TO

MRS. SUSAN BUDD AND MISS ELIZABETH OBORNE VAN AMRINGE.

My Dear Wife and Daughter,

It is one evidence of the love of science and literature by the people, that a distinguished patron is no longer necessary to introduce an author to the public. He is, therefore, at liberty to fawn upon the great, or pay respect to private virtues, without the hope of reward for his sycophancy, or of loss for obeying his inclinations.

But there is a propriety in the dedication of this work to you, exclusive of the affection which has always subsisted between us. It is not only that it has been chiefly by your instrumentality, under Providence, that I have been spared to compose this work; nor is it because you are the only two beings who have watched the progress of my labor, and have known and approved of my views, that I dedicate it to you. It is for something more selfish; a determination that, as we have lived together so happily through all the vicissitudes of private life, you shall accompany me in all my changes—the sharers of my good or bad fortune as an author, as well as in my customary pursuits. You know how sincerely,

I am,

Yours affectionately,

W. F. VAN AMRINGE.

Montgomery, Orange County,
New York, Nov. 1, 1847.

PREFACE.

THE following work was commenced during a very slow convalescence from a severe indisposition, more for occupation and recreation, than in the expectation of giving my speculations to the public, except through the pages of some of the current periodicals. It was, therefore, written in the plural number; a method which would not have been adopted, if I had originally designed it to appear in its present form. The original design was only to write a review of the principles and reasonings of the two eminent works of Lawrence and Prichard; but my protracted indisposition, and consequent long confinement, gave me both leisure and inclination to pursue the subject, and to make it what it is—"An Investigation of the Theories of the Natural History of Man, by Lawrence, Prichard, and others, founded upon Animal Analogies—And an Outline of a new Natural History of Man, founded upon History, Anatomy, Physiology, and Human Analogies."

I had no theory to advocate when I commenced; but being dissatisfied with the theories and inconclusive reasoning of the eminent authors above mentioned, I thought I might do some good to my fellow men by showing that the Natural History of Man had not yet been written. The theory I have ventured to present to the public, grew with the progress of my labor. It may be said, therefore, to be a natural theory, which presented itself without being sought after; and it may also be said to be the joint offspring of Lawrence and Prichard, although it bears no resemblance to either parent,—a "congenital variety,"—which may, possibly, propagate its kind, and become permanent.

The immense advantages I have derived from the labors of these two gentlemen especially, will be apparent to the reader. They have been chiefly of the negative kind; but were not the less valuable on that account.

I owe an apology to the scientific reader for not, in every instance, giving the authorities from which I have drawn many of the facts and arguments used in the course of my work. It was impossible; my library is too small. Confined to my room during the whole time I have been engaged in my work, in an agricultural district very scantily supplied with scientific books; too much indisposed, for two-thirds of the time, to read or write, I found it to be impossible, without delay, trouble, and expense, to procure the necessary authors. I have, therefore, freely quoted the authors in my possession, and was obliged to depend on memory for others, which I did not quote, lest I might misrepresent them.

The scarcity of books has been a serious grievance to me, in the progress of my labor. The great variety, and immense importance of the topics to be discussed in the Natural History of Man, according to my view of it, required a very large and select, instead of a very small, though select, family library. It may be, however, that the scarcity of books has been the reason that so many new views have been presented on the subjects discussed; which might have been withheld if I had had an opportunity to refresh my memory by a re-perusal of the authors. The public may be benefited by having a number of new ideas furnished to the intellectual stock on hand; while the author may suffer by not having placed them in a proper light for his own credit and advantage. Wants, however, are not always disadvantages, though they must be inconveniences. They throw a man upon his resources, if he has any; and have produced the most powerful exertions of human nature, both for good and evil. How they have operated on the author, the intelligent reader must decide.

I have ventured to differ from authorities, in several important instances, which have generally been regarded as standards. I offer no apology for it. If I have contradicted them without sufficient reasons to justify me, I am well aware that I cannot expect, nor do I hope, to be sustained; and, if my reasons are sufficient, no name can stand so high, in the republic of letters, as to carry away the judgment of the public against truth.

It will be observed that, throughout my work, I have avoided the use of technical terms, wherever they could be avoided without prejudice to the sense of the subject. In this I have consulted the taste of the general more than of the scientific reader. It must

be admitted that all the works hitherto published on the Natural History of Man, have been sealed books to the general reader, arising as well from the method of treating the subject, as from abounding in technicalities, which the initiated only could understand, and which the general reader would not be at the labor of deciphering. The subject is too deeply interesting to be made so exclusive. The best interests of mankind are involved in its details; and, if properly treated, cannot fail to interest every man, either from a desire for knowledge, or from motives of curiosity, or benevolence. I do not pretend to have so treated it; but I hope I may be excused for believing that I have clothed the subject in a more appropriate, and therefore a more pleasing garb, than have my predecessors.

ANALYTICAL CONTENTS.

CHAPTER I.

Page.

INTRODUCTION. 25

The Natural History of Man a desideratum. All definitions and systems artificial. Man always described as an animal, not as a Psychical Being. He has slowly advanced in zoological classification, without advantage. Developists gained the fruits of victory, although defeated. The Natural History of Man too important a subject to be measured by animal and vegetable analogies. Man the only analogue for Man. Comparative Anatomy and Craniology are too narrow for foundations of this History. Heeren's view of the subject. His questions in regard to color are important only because it is the visible evidence of a difference of organization. Dr. Lord's Fœtal theory not used, and why. Josephus' distribution of the Patriarchs not followed. Analogy is the foundation of all histories of Man hitherto. A natural truth can stand by itself without artificial props. The History of Man demands greater attention to his Psychical than Physical nature. The peculiar sexual relations of the different races of Men have been hitherto disregarded. They are too important to be neglected. The taste for Sexual Beauty in the different races is founded on an important natural law. An enumeration of the topics to be discussed. Specific differences of the several races are subordinate in importance to the general Psychical, Sexual, Anatomical, and Physiological History of Man.

CHAPTER II.

THE investigation of the subject not forbidden by Scripture. 46

The Church of Rome usurped authority over the consciences and intellects of Men. Her day is passed. Public opinion and Conscience supply her place. Philosophers and Theologians. Scepticism of philosophers not dangerous: Corrected by the progress of Science. Many sciences corroborate Scripture. Bible not given for scientific instruction. Philosophy not legitimately employed in opposing Scripture. Motives influencing authors in writing the History of Man. President Smith, his motive. Danger of a false issue. Moses establishes a diversity of species. Scripture addressed to the understanding as well as to faith. Rule for expounding Scripture. Moses' history short but comprehensive. Parts not easily reconcilable. Adam and Eve, whether the first and only pair. The only human beings in Eden. Cain and Abel. Dr. Good on the theory of Peyrere. Moses does not record two creations. The ante-diluvians not more prolific than the post-deluvians. If there were human beings before Adam and Eve, why create them? Reply. Objections to this construction. Days of Creation. Facts remain the same whatever may be thought of them. Creation of Adam and Eve a remedial measure. Found nothing on this theory. Introduced to show the latitude of inquiry. We admit all the human family sprang from Adam through Noah. The sons of Noah had different destinies, and required to be specifically distinct to accomplish them. Less than a physical change insufficient. Geographical separation, alone, insufficient. God

could modify by his word as well as create. Another view of the subject. Zoology is not interested in the origin of animals, beyond the permanence of generation. Conclusion.

CHAPTER III.

THE Classification of Man, and the proper names of the Species. . . . 67

Cuvier's nomenclature. Blumenbach's. Dr. Prichard's. Division of the Class Mammalia. Zoological character of Man. Reasons for new nomenclature. Harmony with kindred sciences. Josephus' distribution of patriarchs opposed to our nomenclature. His reasons for locating patriarchs investigated. Historical facts against Josephus. Influence of religion, law, and literature on language. Examples from history. Acknowledged errors of Josephus. Jews behind their age in geographic knowledge. "The Isles of the Gentiles" do not necessarily signify those of the Mediterranean. Natural for the Jews to suppose the Mediterranean to contain "the Isles." But the meaning must be looked for at the time of the dispersion, 900 years before the Jews were a nation. When dispersed, the inhabitants of Shinar knew nothing more of the Mediterranean than of the Southern Ocean. Migrations not voluntary, but impulsive. Not left to chance nor human desire. Earliest history proves migratory arrangement by species in masses, "after their families, after their tongues, after their countries, *and in their nations.*" All the yellow people in Eastern Asia; the Red in Central Asia; the Black in Africa and Asiatic Ethiopia; and the White in Western Asia and Europe. Species did not mingle in migrations. Proofs. History our guide, not Josephus. Analogy of names his only authority. Different patriarchs named children alike. Examples. The Hebrew language of Josephus not the language of the patriarchs. Arabian geography against Josephus. Grecian history. Pelasgians not originally savages. How the name Ionia came to be applied to Greece. Not from Japheth, but from Ion, the son of Xuthus, a Pelasgian. The first name of Greece was Pelasgia, not Ionia. These views strengthened by circumstances. All nations around Babylon stationary in civilization. Western migrations were only progressive. Might have avoided this dispute, but preferred to encounter it, and why.

CHAPTER IV.

THE distribution of Vegetables and Animals over the Earth is not analogous to the distribution of the human species, and therefore such distribution will not assist our investigations in relation to Man. 120

The importance of Vegetables. Habitats of Vegetables and Animals. Causes which influence them. Vegetables possess the power of chemical assimilation, which animals do not. Theories of distribution. One Centre. Several Centres. Spontaneous productions. Plants in Europe, Asia, Africa, New Holland, and America. America contains nearly one half of the phanerogamous plants of the world. Of the two last theories unimportant to our subject which is adopted. The earth arrayed at once in perfection and beauty. The agencies of vegetable distribution. Example in Buenos Ayres. Potato. Canada thistle. Geographic distribution of Animals marked by strong lines. Identity of species rare in different Continents. Examples. Field's description of New Holland. Peculiar Fauna which distinguish Asia, Africa, New Holland, Europe, and America. Swainson on the Birds of Europe. Peculiar physical arrangement of America. No Deserts. Magnificent display of Creative power. Humming Bird. Mocking Bird. Quadrupeds. Remarks. Distribution of Man from one Centre. Proofs. Vegetables and Animals are not analogues of Man. Constitutional adaptation of Man for migration, different from vegetables and animals. Omnivorous, naked, ingenious, courageous, and migratory, Man alone accomodates himself to all circumstances. Extract from Dr. Good. Conclusion.

CHAPTER V.

THE progressive improvement of Man, by increased moral and mental faculties, is a law applicable to human nature, notwithstanding the stationary condition of some, and the retrograde condition of another species. . 156

What is progress. The Shemites only possess the elements. The interests of Man promoted by a correct knowledge of the natures of the respective races. The method of investigating the subject of progress. By Geological, the Mosaic, and Profane History. Arbitrary division of Geological periods. The Igneous Period. The Zoophytic. The Saurian. The Mammalian Periods. The Revealed, or Adamic Period. Previous Creations destroyed. New Creation headed by a Psychical, instead of an Instinctive Being. Climate of the Adamic Period. Proofs. Noachian Period. No new Creation designed for it. Singular fact in the history of Man. Men live longer now in three-score years and ten, than did Methuselah in forty-eight score years and nine. Diminished duration of life in the Adamic and Noachian periods. No important geological change since the Deluge. Fixation of Oxygen and other gases during the different periods. Creation out of nothing not a matter of as much surprise as the living self-executing laws impressed on matter. Chemistry proves the world to have been made out of nothing so nearly that but one step remains. Quality produced out of nothing. Man alone organized for indefinite improvement. Shemitic family succeeded to the inheritance of the Jews. Security or liberty essential to progress Tyranny can raise Pyramids, Liberty raises Taste, Genius, Refinement, and Delicacy. Increased moral and mental powers chiefly arise from exercise. Chronology of the Septuagint, and probable time of the Flood. Ancient Civilization, what. Shinar, the centre of distribution. Egypt. Canaan. Phœnica, or Syria. Assyria. Persia. India. China. No important improvement from the Deluge until patriarchal civilization was engrafted on the Greeks. Causes of Progress among the Greeks. The Egyptians built Pyramids, the Greeks intellectual structures. The Romans were stately and grave, as the Greeks were gay and lively. They added little to the Greek stock, but made it the currency of the world. Effects of their conquests. Importance of the division of the Roman Empire. The Dark Age. The Germans. Consequences of their inroads. The Dark necessary for moral and mental renovation. Roger Bacon, Dante, Petrarch, Wickliffe. Progress commenced before the social elements became homogeneous. The Mariner's Compass, the Art of Printing, and Steam Power, their effects upon civilization. Discovery of a New World. Constitutional capability for Progression increased. Examples. Materials or elements of Knowledge always the same. Apples fell from trees before one fell on Newton. Water boiled and steam generated before the Marquis of Worcester. Elements the same, but capability increased. Capability and experience must be equal. Generation transmits capability. Comparison of the different Species in regard to capability. The Ante-Adamic periods types of the Post-Adamic. Responsibility of the Shemitic Species cannot be discharged by avowals of brotherhood. Asia surrounded by Shemites. Probable consequences. Africa invested on three sides. Oceanica occupied. Civilization actively in progress. Conclusion.

CHAPTER VI.

THE effect of Climate, mode of living, &c., to produce organic and functional differences in men. 216

How it came that climatic influences were supposed to be applicable to man. Animal analogies. Animals have prescribed habitats. Isothermal lines not equally habitats. Man has no habitat. Domestic animals not analogues for Man. They are not analogues of each other. Wild types not known. Sheep never known wild. Would become extinct without the protection of man.

The Horse probably the last domesticated quadruped. His wild type lost. Change of color of Cattle and Sheep in Jacob's history. Tendency to change in different animals. Mice and Rats have suffered no change. Sheep, Oxen, and Horses, variable in a wild state. Assumptions by the advocates for the unity of species. Food of men and animals, in which they are not analogous. Color an important specific item. Importance of, to the animal economy. Zoology not interested in the operations of climate, if they are invariable on the same subjects. If climate can produce specific changes, the doctrine of La Mark is proved. Specific differences of men the same, whether produced by climate or direct creation. Individual examples prove nothing of a general nature. Inductive and syllogistic logic. President Smith's method. Example. Example from Lawrence. Dr. Smith's opinion of the Negroes of the U. S. controverted. The wide dispersion of the Jews. Their original type preserved. All the races known for 3500 years. The same species in all climates preserve specific character. Example from Lawrence.

CHAPTER VII.

WHAT constitutes a distinct species. 246

Different attempts at a definition of species. Hybridity. De Candole's, Lawrence's, and Prichard's definitions examined. Not correct. Dr. Prichard abandons his definition, and assumes an independent position, which is examined. Lawrence also abandons his definition. Descent how proved zoologically. Hybridity, what it is. Anatomy and Physiology indicate zoological character. What they signify. Owen's Osteological comparison of the Orang, Chimpanzee, and Man. What it proves on our subject. Psychical beings importantly modified by slighter differences than Instinctive. Ogilby on the value of a thumb. Zoological characters of Polypi and Infusoria. Definition of Species, and critical examination of it. Supported by examples. De Kay's New York Fauna, Class Mammalia. All animals governed by Instinct but Man. Reason in Man the equivalent for instinct. General survey of the different zoological families of Man. British compared with the Chinese. Secret of British superiority actually three times the population. Capability of improvement of all the races proves nothing but that they are all Psychical. Glance at the psychical condition of all the races. Shemites colonize, other races do not. Characteristics of species must be permanent. Nature of proof to establish it. Natural law applicable to it No permanent varieties. Probable presumption is the weakest proof. Violent presumption is often equivalent to positive proof. What gives rise to it. Positive proof, what. Application of these principles to our definition. Different specific organizations have prevailed immemorially among men. All the races of men agree in generic characters. Physical characteristics unimportant compared with Psychical. Differences of races in this respect. Conclusion.

CHAPTER VIII.

WHETHER the differences of physical organization, and of moral and intellectual qualities which characterize the several races of men, are analogous in kind and degree to those which distinguish the breeds of domestic animals, and must therefore be accounted for on the same principle. . 308

Statement of the question. Analogies used without reasons, which should be explicitly stated, but which has not been attempted. Easy mode of philosophizing. Analogy is not of indefinite meaning. Resemblance is not analogy. Analysis of definitions. In comparative Anatomy, what. Examples. Difference between scientific and strict analogy and speculative. Speculative should be founded upon strict. Example. At best uncertain. Not a fit foundation for Science. Natural History of Man founded on Speculative Analogy and

Resemblance. Analysis of the subject. Domestication and civilization not synonymous. Meaning attached to them. Effects of domestication upon animals extremely difficult to be known. Dr. Prichard's statement. Wild types restored in America supposititious. But granted, and all conclusions founded on it, and what then? No physical change of men by civilization, proved. What is man, and what an animal. Difficulties of definitions arise from what cause. Infinite variety of organic life. Man is a psychical animal. Few instincts compensated by mind. Animals inferior in what. Reason may violate natural laws, instinct never. Superior to instinct, in what. To attribute psychical power to animals an error. Lawrence's opinion. The Mule on the Andes is no example. Impropriety of examples from single traits. The mind of Man not a single trait, but a combination of many, all equally necessary. What constitutes the mind not the question. Mind without brains. Lawrence refuted. The mind to be judged, zoologically, by manifestations. The Elephant, Fox, and Horse, compared with the Bee, the Ant, and the Spider. Marvellous stories of animals. Strong instance of apparent reason in the Bee. Definition and analysis of instinct. It is unimprovable. Altered by domestication, but returns to types when set at liberty. Its limits. Example. Instinct more perfect than abstract reason. Examples. Uniform, even in deviations, under all similar circumstances. Reason defined. Improvable. Examples. Extension and expansion of. An additional sense, exclusively human. Spallanzani's experiments on Bats. Accounted for by Cuvier. Reason produces different modes of action in men. Comparison of the mechanical powers of men and animals. In what sense man is domestic, not explained by authors. Animals are not domesticated, but enslaved. Improvements by domestication are degenerations. Civilization produces improvement, not degeneration. Why. Man and animals analogous, in what. In classification the descending series give value to the ascending. Quotations from Lawrence. Importance of slight anatomical and functional differences. Dr. Prichard's Psychological Characteristics of animals. Materialists. Man a Psychical Being apart from eternity. Kings of Egypt returning to the living. Man the type of all nature. His improvements voluntary. Conclusion.

CHAPTER IX.

THE Anatomical and Physiological structure and functions of the different races of Men are sufficient to constitute distinct species. 360

The comparative importance of Anatomy in different departments of Natural History. Anatomy insufficient to class Man. Man is more than a mere animal. His erect attitude is not a subject for boasting. The human mind is not disclosed by the knife to the materialist. Division of the human head. The Skull. The Face. The relation between them. The Forehead. The Facial Angle. Of little value to compare different species. But an approximation to the truth in the same species. Size and proportional weight of the Brain of Men and Animals. Ratio of the Brain to the Nerves. Lawrence's opinion of these theories. Sandy matter in the Pineal gland an evidence of virility. Universal rule sought, but not found. Method of Phrenologists. Division of the Skull into moral, intellectual, and animal properties and propensities correct. The foundation of Craniology. Exceptions. Craniological rules applicable to one species may not apply to another. Example. The mass of brain is important, but not more than quality. Dr. Smith's opinion. Operations of the Encephalos not understood. Order in complexity. Evidence that mass of brain is not all-important Function, what. The cause of function is not the mind. The effect is. Childhood. Puberty. Manhood. Temperaments of the different species. Strenuous. Passive. Callous. Sluggish. Insensibility of all the dark races. The skin, different in the different races. Rete mucosum, what it is, and how it modifies sensibility. Cutis. Conclusions from the facts. The matter which constitutes the Rete Mucosum

pervades the flesh. Canaanites not subject to nervous disorders. Dr. Prichard on the Rete Mucosum. Albino compared with European. Colonization Society. Hair and perspirable matter. Dr. Prichard proves the Negro not to have wool, but veritable hair. Remarks upon his concluding paragraph. Color of the hair independent of the Rete Mucosum. Dr. Prichard's examinations of different hair, what they prove. Exceptions unimportant. Less carbonic acid expired by the negro, and more animalized. Functions of the lungs. Lubricity of the skin and Odor. Diseases. Identity of, in the races is no evidence of the unity of species. Torpor of the dark races. Domestic animals subject to human diseases. Vaccination. Example of epidemics. List of identical animal and human disorders and remedies. Osteology. Skull and brain. Craniology proves too much by classing half of Asia, North Africa, and Europe, ancient and modern, together. Crania of the Turks probably not correctly observed. Functions more important than osteology. Modification of one bone modifies the system. Smith in relation to the chin. Physical characters of the different species. Conclusion.

CHAPTER X.

WHETHER any, and what inferences can be drawn from accidental varieties springing up in the human family, to enable us to account for the differences observed among men. 422

Negroes the progenitors of mankind. Dr. Prichard's theory. A Law of Nature. Albinos always known to belong to the species from whom they are derived. Buffon's theory. Mutes. All monsters hybrids. The Porcupine men. These freaks of nature prove men to have been made in the form they now bear. Albinos among all warm blooded animals. Varieties not now produced. Proportion of monstrous births not one in millions. Chances against them. Esau. Not early enough. Is there no place in the world now fit for the process? New Holland? America? Dr. Prichard's mixed races not permanent. Mulattoes return to their types. They are hybrids. Professor Wagner's rule. Maternal influence on progeny. The doctrine of congenital varieties depends on analogy. The Porcupine family is extinct. They were incapable of continuing the species. Conditions necessary to produce varieties in the animal kingdom. Constitutional preparation necessary. Youatt. Tendency in stock to return to original type. All the conditions inapplicable to Man. If animals are the analogues of man, the conditions are essentials. Lawrence's theory. Preventing intermixture is not the only requisite for success. If animals are analogues now, they were not 4000 years back. If domestication and civilization are equivalents, why do not white women now bear black children. Lawrence's examples to prove color not essential to race examined. Exceptions slight to a general law. Natural varieties within the limits of species. Thirty three-millions of children born every year, each different, yet preserving their specific agreements. Conclusion.

CHAPTER XI.

THE Psychical Attributes peculiar to Man. 454

Why called attributes. Dr. Prichard's Psychological Characteristics. All Religions of one origin. The universal idea of spiritual agency derived from one source. Geogony of each species peculiar. Extraordinary distribution of the specific masses of mankind. Different races took different routes. Division of religion into symbolical and personified. Regularity of arrangements in apparent confusion. Sexual relations of the different species. Monogamy destroyed patriarchy in the Shemitic family. Poets the early priests of Shemites. Homer and Hesiod. Edda and Voluspa. Ossian. Education, Religion, and Government, not the foundation of intellectual character, but Genius, founded

upon specific temperaments. Benevolence universal among men. Comparison of species in regard to it. Conscientiousness universal. Influence of education upon. Expansive quality of. Intellectual Appetite. Its peculiar manifestations in, and contrasts of the several species. Prudence depends chiefly on specific temperaments. Species contrasted in regard to. Admiration what. Specific differences and contrasts in regard to. Fame what. Objects of. War and Hunting. Theory of Jurists. Contrasts of Species in regard to. Speech, or Language. Origin of. Not artificial. Duponceau and Richardson's opinions. Dr. Blair's theory examined. Vocabulary of Adam. Variety of Languages. Affiliation of Languages. Shemitic, Japhethic, Ishmaelitic, and Canaanitic Languages. Reason, or Causality what. Phrenological organs denied. Influence of Temperaments upon. Identity of civilization of the ante-historic world. Standard of mind after the flood. Patriarchal, or Colossal civilization. State of the arts and sciences. Egypt, Babylon, Nineveh, India, China, all very similar. Greeks only remodeled patriarchal civilization, and made it progressive. Patriarchal civilization a type for Asia and Africa, but only a rudiment for Europe. Importance of sexual relations to progress. Admirable migatory arrangements of the patriarchs. Sesostris. Shepherds. Colchians. Germans. Pelasgians. The Greeks the types of Shemites. The Dark Age. Reinvigoration of Shemitic intellect by the infusion of the German. Greeks best qualified for types, Germans for progression. Precocious and early maturity of the Grecian, more than compensated by the substance of the German element. Contrasts of the species in respect to intellectual power. Dr. Prichard's comparison of the human races with respect to mental endowments examined.

CHAPTER XII.

The History of Woman is a necessary and important item in the Natural History of Man. 595

Woman's power, active and passive. Anterior to education. The condition of, indicative of specific character. Men have advantages which are compensated to women. The Dark Races. The Shemitic Species. Seraglios. Zananahs. The Turk and Hindu. Chinese. Africans. New Hollander. European. Specific differences made by *Him* who knows. Different treatment of women arises from difference of specific temperaments, not from education and government. Mohammedanism. Spaniards. Hindus. Israelites not examples of the sexual relations of the Shemites. The Greeks and Romans omitted. Heeren's remarks. Fact in Herodotus. Germans. Tacitus De Mor. Ger. Guizot's theory against Tacitus examined. The importance of the subject. Flippant manner of disposing of Tacitus. The sexual relations of the Germans do not depend exclusively on Tacitus. Confirmed by Cæsar, Florus, &c. German women taken as hostages for the performance of treaties. Guizot indirectly confirms Tacitus. The Germans barbarians in the arts and sciences, the Romans in morals. Feudalism introduced by the Germans. What elements of civilization sprang from it. Isolation. The Baron in his Castle, and what he carried to it. Guizot's theory against Tacitus' facts. Guizot's subsequent Lecture. His analogies improper. His conclusion is not against Tacitus. His two things introduced by the Germans. A third proposed, the individuality of woman, and the importance of this element. The Germans produced modern civilization. They saved Europe from the Ishmaelites and Mohammedanism. The social manners and habits of the Ishmaelites. Sexual relations of the Bedouins. Women slaves. The Kereks. Persians. Voluptuous education of women. Instances of degradation. Japhethans. Women are merchandise among them. Mode of getting a wife. Women's apartments. Widows sold for the benefit of heirs. Canaanites. General ignorance of. Their amusements. Dancing and Music. No limits to polygamy. King of Dahomey has 3000 wives. King of Kiama's visit to Clapperton. Incident with Clapperton. Waloss. Sereres. Bambuk. Dahomey. Ashantee. Ta-

riba. Examples exhibit specific differences. Sexual relations founded in nature. Education and government subsequent to, and founded on them. Constitutional temperaments form sexual relations. Remarkable differences in species of the Strenuous, Callous, and Passive temperaments. The Sluggish temperament remarkably adapted to the circumstances of Canaanites. Shemitic civilization alone benefited by Woman. Its effects. The foibles of women are means of civilization. Polygamy universal among the dark races. Cannot be the effect of accident. Sensual desire, not the sentiment of love, the motive. Polygamy opposed to moral and intellectual improvement. The importance of sexual freedom. Qualities of Woman. She has no security for rights but in the male. Laws give her no other security. Love has a higher object than the perpetuation of the species. Intellectual progression depends on it. Social institutions are founded on sexual relations. Conclusion.

CHAPTER XIII.

THE great Natural law which has kept each species of Man distinct from every other. 640

Power of Beauty. Its influence on Man. What is it? A universal principle applicable to all sorts of Beauty unattainable. No natural standard of. Beau ideal of the Greeks. Natural Beauty divided into organic and inorganic. Organic divided into Vegetable, Animal, and Human. Examples. Beauty of the Imagination. Mixed Beauty. Of the Heart. Human Beauty influenced by Temperament. Geographic lines insufficient to separate species. Specific Tastes for Beauty. Specific Standards. Importance of freedom of both sexes to alliances. Wants the foundation of love. Crosses in species beneficial, out of species prejudicial. Moral and mental qualities constitute the highest charms. They give brilliance and elegance to features. Polygamy unnatural. Happiness of the female as important as that of the male. Desire for matrimony equal. All dark races polygamous. Children inherit qualities from parents. Walker. Knight. Prichard. Lawrence. Dr. Watts. Which parent is most influential to impart qualities to offspring. Expanding influence of sexual intercourse. Absence of female influence in the dark races. Importance of Courtship. Sir Walter Scott. The various specific Temperaments produce corresponding differences of sexual relations. Lady Montagu's opinion in regard to personal beauty. Moral and Mental Attributes not always united in the same person. Human laws declaratory of the Natural. Sir Wm. Blackstone. Walker's theory of propagation by halves, not blood. Functions are the joint gift of both parents. Examples. Amalgamation an injury without benefit. Gutzlaff. Domestic animals and Man not improvable by the same process. Method of improving domestic animals. Sir Walter Scott's lamentation without cause. Dr. Johnson's opinion of the marriage process. Cruel laws of Babylon and Dahomey. The Moral and Intellectual world under the control of natural laws. Not seen in individuals, but in masses. The Vices and Virtues of a community are subject to figures, while individual free agency is not interfered with. These laws are necessary for progression, of which sexual love is the foundation. Conclusion.

CHAPTER XIV.

Conclusion. 741

Recapitulation of the arguments.

CHAPTER I.

INTRODUCTION.

The Natural History of Man is yet a desideratum in science. It lies scattered on the pages of the history of nations, in books of travels, in missionary reports, and in the works of philosophers, who have written on the Comparative Anatomy and Physiology of the several races. Nay, it may be said, that it lies scattered over the whole literature, arts, sciences, and condition of the world, ancient and modern; but has never yet been collected, arranged, and condensed.

It must be acknowledged that all the definitions and systems which have been framed in relation to Man, are more or less artificial. From the Grecian philosopher who described man as "a biped without feathers," to the English philosophers, who defined him as "an animal that cooks his victuals," or, "an animal that makes bargains;"—and the American philosopher who defined him as "a tool-making animal," his animal properties alone have been considered, without reference to man as he is—a psychical being. Philosophers who have professedly written the Natural History of man, have made nothing more of him. From Linnæus to Prichard, he has been classed and treated exclusively as an animal. It is true, that he has been slowly advancing in zoologi-

cal classification. Recent writers imagine they have done much for the honor of the race, by placing him in an *Order* by himself,—thus separating him from the debasing association of monkeys, lemurs, and bats. It amounts, however, only to a nominal honor; a promotion without advantages; a distinction without a separation. They have, nevertheless, kept man so closely associated, not only with the anthropoid animals, from which they were so anxious to separate him (but with the whole of organic nature), that everything having life is regarded as his analogue, his associate, in the highest and noblest properties of his nature.

It is true also, that, in their contests with developists, much pains have been taken, and scientific skill displayed by authors, to exhibit the anatomical and physiological differences between man and animals; but having satisfactorily accomplished this feat, they have reaped no advantage by the victory; for they immediately fraternize with their foes, with a magnanimity which could not have been expected from the violence of the contest. Judging from the results, rather than the fact, peace was established by a compromise, rather than a victory; in which Bory de St. Vincent, Lamarck, &c., were the most skilful diplomatists. By adroitly yielding, on a mere point of empty honor, the precedence in classification, they secured the substantial advantages for the whole of organic nature to be the analogues, the types of man; to be the representatives of his nature, the controllers of his destiny, and the expounders of his powers and qualities, physical and psychical. Progressive deve-

lopists could ask for no more. They gained the fruits of victory, if they lost the battle. Horses and asses, oxen and sheep, dogs and hogs, rabbits and poultry, &c., constitute the bases of all theories, of all arguments, of all conclusions, in relation to the highest and noblest attributes of Man. If, after having effectually separated man from animals, by an *Order*, they had confined their analogies to that in which they acknowledged them to agree—the Class—it would have been consistent with their own arguments and positions. But they rejected none, whether they related to species, genus, or order—the very things in regard to which they had so satisfactorily proved a total disagreement. And yet it is so evident that there can be no analogy, where there is no agreement, that we are surprised the very able philosophers who gained the victory over the Developists, so readily conceded to them the principle of the contest, while they were satisfied with the name of victory.

The Natural History of Man is much too vast a subject to be measured and restrained by animal analogies. There is not, in the whole range of the natural sciences, a branch of as deep interest to the philosopher, or one which should be more entertaining and instructing to the general reader. The theme is boundless in extent and variety. Is the reader fond of the dry, the abstract, and the logical? Where can he find a subject to supply him with materials for his abstractions and logic, in greater abundance than in the Natural History of Man? Is science his *forte?* Where can he find more than is

contained in comparative and human anatomy and physiology, philology, &c.? Is history the object of his admiration? What history of any single nation is so vast, so important, and so interesting, as the philosophical history of mankind? Does he desire to witness God's providence in the government of the moral world? What displays it more remarkably and wonderfully than the history of the mass of mankind, the peculiarly singular arrangements of masses, and the simple instrumentalities He has employed to accomplish his designs, in regard to the onward march of the mind in progressive development? Is he a philanthropist? What will enable him to discharge his duty to all men so efficiently as to know the wants of mankind, and the means of relieving them? Is he a statesman? Where can he find more valuable instruction than the various influences which have produced the moral and intellectual advance, stationary condition, and retrogression of the races of men? In short, the subject is entirely too vast, too rich, and too important to receive illustration or assistance from any analogies below itself. Man with man, species with species, are the only analogues for one another; which we have endeavored to prove in the following pages.

Comparative Anatomy, and particularly Craniology, in their ordinary acceptations, important as they are, are also too narrow to form a foundation for this history. Valuable as they must be acknowledged to be, as aids, in the present state of knowledge they have not sufficient substance to form a foundation. Assuming the European skull as the standard

of perfection, the Western Asiatic nations have decidedly better formed crania than the nations of Eastern Asia. Have they a corresponding advantage over them in the arts and sciences? Is not the error equally perceptible when Craniology classes the western half of Asia, and North Africa, with Europeans by their skulls? We have in the progress of our work endeavored to show that Anatomy in general, and Craniology in particular, are subordinate to Physiology, to the functional system, as indicated by the temperaments.

The talented Heeren, in his "Preliminary Remarks" of his "Researches on Ancient Greece" has the following sensible and pertinent remarks:—"To the student of the history of man, there is hardly a phenomenon more important in itself, or more difficult of explanation, than the superiority of Europe over the other parts of the earth. Whatever justice may be rendered to other lands and nations, it cannot be denied that the noblest and best of everything, which humanity has produced, sprang up, or at least ripened, on European soil. In the multitude, variety, and beauty of their natural productions, Asia and Africa far surpass Europe; but in everything which is the work of man, the European nations stand far above those of the other continents. *It was among them, that, by making marriage the union of but one with one, domestic society obtained that form, without which the higher culture of so many parts of our nature could never have been attained;* and if slavery and bondage were established among them, they alone, recognising their injustice, abolished them. It was

chiefly and almost exclusively among them that such constitutions were framed as are suited to nations who have become conscious of their rights. If Asia, during all the changes in its extensive empires, does but show the continued reproduction of despotism, it was on European soil that the germ of political freedom unfolded itself, and under the most various forms, in so many places, bore the noblest fruits; which again were transplanted to other parts of the world. The simplest inventions of the mechanic arts may perhaps belong in part to the East; but how have they all been perfected by Europeans! What progress from the loom of the Hindoo to the power-looms driven by steam; from the sun-dial to the chronometer, which guides the mariner over the ocean; from the bark canoe of the Mohawk to the British man-of-war! And if we direct our attention to those nobler arts, which, as it were, raise human nature above itself, what a distance between the Jupiter of Phidias and an Indian idol; between the Transfiguration of Raphael and the works of a Chinese painter! The East had its annalists, but never produced a Tacitus or a Gibbon; it had its poets, but never advanced to criticism; it had its sages, who not unfrequently produced a powerful effect on their nations, by means of their doctrines; but a Plato or a Kant never ripened on the banks of the Ganges or the Hoang-ho."

"Nor can we less admire that political superiority, which the nations of this small region, just emerging from savage life, immediately established over the extensive countries of the large continents.

The East has seen powerful conquerors; but it was only in Europe that great generals appeared, who invented a science of war really worthy of the name. Hardly had a kingdom in Macedonia of limited extent outgrown its childhood, before Macedonians ruled on the Indus as on the Nile. The imperial city was the heiress of the imperial nation. Asia and Africa adored the Cæsars. Even in the centuries of the middle age, when the intellectual superiority of the Europeans seems to have sunk, the nations of the East attempted to subjugate them in vain. The Mongolians advanced into Silesia; nothing but the wastes of Russia long remained in their power: the Arabs desired to overrun the West; the sword of Charles Martel compelled them to rest contented with a part of Spain; and the chivalrous Frank, under the banner of the Cross, soon bade them defiance in their own home. And how did the fame of Europeans beam over the earth, when, through Columbus and Vasco de Gama, the morning of its fairer day began to dawn. The new world at once became their prey, that it might receive their culture, and become their rival; more than a third part of Asia submitted to the Russian sceptre; merchants on the Thames and the Zuyder See seized on the government of India; and if the Turks have thus far been successful in preserving the country which they have robbed from Europe, will it remain to them for ever? will it remain to them long? The career of conquest may have been marked with severity and blood; the Europeans became not the tyrants only, but also the instructors of

the world. The civilization of mankind seems to be more and more closely connected with their progress; and if, in these times of universal revolution, any consoling prospect for the future is opened, is it not the triumph of European culture beyond the limits of Europe?

"From whence proceeds this superiority, this universal sovereignty of so small a region as Europe? An important truth presents itself at once. Not undisciplined strength, not the mere physical force of the mass—it was intelligence which produced it; and if the military science of Europeans founded their sovereignty, it was their superior political science which maintained it. But the question which was proposed remains still unanswered; *for we desire to know the causes of this intellectual superiority; why it was in Europe that the faculties of human nature were so much more beautifully unfolded?*

"To such a question no perfectly satisfactory answer can be given. The phenomenon is in itself much too rich, much too vast for that. It will be readily conceded that it could only be the consequence of many cooperating causes; of these several can be enumerated, and thus afford some partial solution. But to enumerate them all separately, and in their united influences, could only be done by a mind, to which it should be granted, from a higher point of view than any to which a mortal can attain, to contemplate the whole web of the history of our race, and follow the course and interweaving of the various threads.

"Here attention is drawn to one important cir-

cumstance, of which the cautious inquirer almost fears to estimate the value. Whilst we see the surface of the other continents covered with nations of different, and almost always of a dark color (and, in so far as this determines the race, of different races); the inhabitants of Europe only belong to one race. It has not, and it never had, any other native inhabitants than white nations. *Is the white man distinguished by greater natural talents? Has he by means of them precedence over his colored brethren?* This is a question which physiology cannot answer at all, and which history must answer with timidity. *Who will absolutely deny that the differences of organization, which attend on the difference of color, can have an influence on the more rapid or more difficult unfolding of the mind?* But, on the other hand, who can demonstrate this influence, without first raising the secret veil which conceals from us the reciprocal connexion between body and mind? And yet we must esteem it probable; and how much does this probability increase in strength if we make inquiries of history? The great superiority, which the white nations in all ages and parts of the world have possessed, is a matter of fact, which cannot be done away with by denials. *It may be said this was the consequence of external circumstances, which favored them more. But has this always been so? And why has it been so? And further, why did those dark nations, which rose above the savage state, attain only to a degree of culture of their own;* a degree which was passed neither by the Egyptian nor by the Mongolian, neither by the Chinese nor by the Hindoo! And

among the colored races, *why did the black remain behind the brown and the yellow?* If these observations cannot but make us inclined to attribute differences of capacity to the several branches of our race, they do not on that account prove an absolute want of capacity in our darker fellow-men, nor must they be urged as containing the whole explanation of European superiority. This, only, is intended; *experience thus far seems to prove that a greater facility in developing the powers of the mind belongs to the nations of a clear color;* but we will welcome the age which shall contradict this experience, and exhibit cultivated nations of negroes."—*Bancroft's Heeren on Ancient Greece.*

We have made this extract to give to the reader a clear view of the extent and importance of the subjects to be discussed in the following pages. The Natural History of Man, if it should not attempt to answer the queries of the acute Heeren, fails to perform what is required of it. The first attempt may not accomplish the task; but if it should point out the way,—if it should make some progress, however slight, something will have been done to enable others to make greater, and more important advances. We do not pretend to stand upon the elevated point mentioned as necessary to "contemplate the whole web of the history of our race, and follow the course and interweaving of the various threads;" for a more humble position,—that of a plodder, a careful and patient searcher among the ruins that lie scattered over a vast extent, which have beenaccumulating for ages anterior to profane history—may be

more successful in making rich and valuable discoveries, than he, who, from an elevation, surveys the mounds and rubbish under which they are buried.

Mr. Heeren's questions in regard to color are important, only because color is the visible evidence of a difference of organization. With an identical organization in the same race, a variety of color only indicates psychical powers varying with the temperaments; but in different races color indicates a wider disparity of psychical powers. No evidence has yet been furnished, that Albinos of any race are superior to those from whom they sprang. The evidence, so far as it goes, proves the contrary. The reason is that they possess essentially the same organization, modified unfavorably; and the evidence of identity is found in the fact, that a negro albiness, with a negro husband, never has mulatto offspring, which she is sure to have with a European husband. What differences prevail among persons of the same race, by a darker or lighter color, has not yet been ascertained, except in the white race alone. With Europeans, a dark color, within the range of the specific temperaments, indicates an increase of psychical power: and yet the color of the European, of a bilious temperament, possessing the highest intellectual powers, may be as dark, or even darker, than that of some Turks, Persians, Hindoos, or Chinese, whose psychical capabilities are entirely of a different, and of an inferior kind. But we must not anticipate our arguments, which will be found, relating to this subject, in their proper place.

It will be observed, that we have not noticed the

singularly curious history of the human brain given by Dr. Lord in his valuable Popular Physiology. After giving a history of the human brain, from its earliest cognisable appearance in the embryo fœtus, and traced it from the brain of a fish, through the reptile, the bird, and the animal mammal, to man, he says—"But we have not yet done with the human brain. M. Serres has made the still more singular observation, that in the advance towards the perfect brain of the Caucasian, or highest variety of the human species, this organ not only goes through the animal transmigrations we have mentioned; but successively represents the characters with which it is found in the Negro, Malay, American, and Mongolian nations. Nay further, the face partakes in these alterations. One of the earliest points in which ossification commences, is in the lower jaw. This bone is consequently sooner completed than the other bones of the head, and acquires a predominance, which, as is well known, it never loses in the Negro. During the soft pliant state of the bones of the skull. the oblong form which they naturally assume, approaches nearly the permanent shape of the American. At birth, the flattened face, and broad smooth forehead of the infant, the position of the eyes rather towards the side of the head, and the widened space between, represent the Mongolian form; while it is only as the child advances towards maturity that the oval face, the arched forehead, and the marked features of the true Caucasian become perfectly developed."

We say we have not noticed these circumstances

in the main body of our argument, because we could see no just conclusions that could be predicated on them. To conclude from them that the varieties in the human family have arisen from a less or greater development,—a comparative immaturity or maturity of the fœtus, is altogether gratuitous, and opposed to facts. If so, why is not a seven months' Caucasian child, a Negro, a Malay, an American Indian, or a Mongolian? Why is the time of gestation of all races the same? But it proves too much; for if the Negro is an immature Caucasian, the fish is an immature Caucasian also, only requiring a greater number of transmutations. Progressive developists have already seized upon this circumstance to assist them to establish their theory; and ingenious men may make of it almost anything they may desire. It is true we might have used it legitimately, to show a downward series of species, genera, orders, and classes of organisms, and the remarkably close connexion established between them, from the Caucasian, through the Mongolian, Malay, American, Negro, instinctive mammalia, &c. In this manner it might have been used as cumulative proof of specific differences to the evidences we have furnished. But the proof being sufficient without it, did not need it. Besides, if the facts were worth anything, they establish a nearer approach to animals, by the lowest grade of human beings, in their psychical powers, than is consistent with truth; for, although, as mere animals, the structure and functions of the dark races regularly approach, in the descending series, to instinctive mammalia, yet, as

psychical beings, the whole human family is separated from animals, by an interval too wide and too apparent to be overlooked.

It will be perceived, that we have placed the Natural History of Man on entirely a new basis. It was necessary, in order to meet the broad view we entertained of it. We have adopted patriarchal names for the species of men, which has brought us into collision with Josephus, and the host of learned men who have followed, or enlarged upon him, in their various speculations. How we have sustained ourself, must be judged by others; but, we think, the investigation cannot fail to draw the attention of the learned to the subject, more critically than it has hitherto been. The public mind seems to have settled down upon Josephus's location of the descendants of the patriarchs, without a question. It has been a foundation for many important conclusions, and the cause of difficulties and errors. His distribution of the patriarchal founders of nations, is opposed to the historical and traditionary distribution of the human family. We have endeavored to make this apparent, not only in the chapter upon Classification, but in various other parts of the work.

Analogy is the foundation of all the theories which have been adopted in relation to man. It is the instrument used on all occasions, and for all purposes. It is one of power, when properly used, but a mean of error when used improperly. It may be truly said, that, unless the most unrestrained liberty of using analogies is permitted to them, none of the authors upon the Natural History of Man have done more

towards the object, than to collect a few facts, which may be useful. This indispensable necessity for the liberal use of analogy, may well cause a suspicion that the theories are defective; for a natural truth can stand by itself, without artificial props to surround and sustain it. We acknowledge that strict analogy has sufficient substance to be the foundation of science: but there are so many other things which bear a close resemblance to it, that, without a perfect acquaintance with them, and a constant vigilance, we are liable to be imposed upon by counterfeits. We have examined these analogies with all the care and skill we possess. If we have not exhibited their fallacy, it arises from the want of ability in us, and not the propriety of the analogies.

We pass over several matters which are treated of in the following pages, which were necessarily noticed, either to remove difficulties, or to make our work a whole. But we call the attention of the reader to the fact, that we have devoted more space to the psychical, than to the physical character of mankind. In this respect we have reversed the order usually pursued; or, perhaps, it will be nearer to the truth to say, that, in this respect, our views are altogether new. Others have incidentally mentioned the intellectual powers of man; but we remember none who has noticed his peculiar attributes, and contrasted the several races by their developments. Are not these necessary items in a Natural History of man? What is man without them? To say nothing of a hereafter, of a future state of existence, of the relation of the spirit to the Creator, what is man here, in

this world, in his relations to his fellow-creatures, without psychical attributes? The beasts of the field have certain invariable, and by their own acts, unalterable relations and conditions; but man, by his own acts, changes his relations and conditions continually. And these relations and conditions are not only undergoing continual changes in regard to his fellow-creatures, but also in regard to the inorganic world which surrounds him. All the powerful agents of nature are submitting to his authority—the winds, the waves, steam, electricity; who will prescribe the limit of his psychical power—the triumphs of his genius? What Natural History of Man can be written without noticing his psychical phenomena?

Our method of treating this subject may not meet with general approbation; for nothing is more difficult than to classify and define the fundamental principles of the human mind. Phrenologists have failed to accomplish it, after the greatest industry and most patient research. But we have not attempted an accurate analysis of the human mind, as a statement of its prominent leading features was sufficient for the purpose of contrasting the several species. But the division of the human mind into distinct attributes, was by no means the chief difficulty—compared with the difficulty of their manifestations in, and contrasts of the several species, according to any division, it was nothing. We are fully sensible of our inability to execute this task creditably; but thought, nevertheless, that notwithstanding its imperfections, we might make it sufficiently accurate to answer the purpose of a general outline.

The sexual relations of the different races of men have not been noticed by any natural historian of man; and yet their influence on his destiny, have, probably, been of more importance than all others combined. These relations must have preceded the influences produced by government and education, because they were anterior to both. They are, therefore, immediately founded upon the natural character, or temperament, of each race, and indicate it with greater precision than any other circumstance. It is one of the most remarkable circumstances in the history of man, that, in all the dark races, women are slaves and articles of merchandize; while in all the white races, except the Caucasians (Circassians and Georgians), they stand on the same platform with man. Women retaliate most severely upon men for the evil treatment they receive; and repay liberally for kind, generous, and humane treatment. It is not less severe, nor less liberal, for being unintentional. "Like begets like," is a universal law of nature; and in the execution of this great law, woman is generally more active than man.

A difference of taste for sexual beauty in the several races of men, is the great natural law which has been instrumental in separating, and keeping distinct, the different species of men, more effectually than mountains, deserts, or oceans. This separation has been as perfect for the whole historic period, and continues to be now as wide, as it is, or has been, in any distinct species of animals. Why has this been so? Did prejudice operate four thousand years ago, exactly as it operates now? If it did not,

how came the races to separate into distinct masses at the very earliest known period, and either voluntarily, or by force, take up distinct geographical abodes? If God made all men of one species,—a universal brotherhood,—how came this prejudice, a mere human impulse, to have sufficient power to counteract *His* design,—that they should fraternise as members of one family? Where is there another instance in which man has possessed the power to overrule God's providence, for so long a period, so effectually, and universally, *in regard to the mass of mankind?* That a man, or a nation, as individuals, may, for a comparatively short period, violate the *natural* law of God, is most certain. That large masses may violate the *moral* law is also certain. But a violation of a natural law must be *temporary*, because the punishment follows so closely, and is so precisely proportioned to the violation, that the criminal is constrained to return to his duty; and a violation of the moral law, if not so immediately punished, and so quickly restrained, receives its reward in this world, as well as the next. The sexual relations,—the laws relating to sexual love,—are laws of our nature. Modified they may be, by the progress of civilization, but never fundamentally altered. If they have been altered at all, were they not altered before civilization had produced any differences in the races?

What then becomes of the universal brotherhood of man, if by brotherhood is to be understood a unity of species, a natural right of fraternity, a community of right, privileges, and powers? If by frater-

nity, it is only designed to express the obligation of each species, and of every individual of each race, to promote the happiness, welfare, and prosperity, of every other race, it is readily and freely conceded. But the question we are discussing is not the nature and extent of the moral obligation of man to man, but the zoological question of species, or varieties; for after all, it is a mere question of species or permanent varieties. What is the moral difference between them? How is benevolence, philanthropy, concerned in the decision of this question? Most assuredly in having it determined correctly, according to the natural principles which the Creator established; for the path of human duty must always be in harmony with His laws, and the first requisite is to understand them.

We expect to prove by the following pages—That the whole subject of the Natural History of Man, as it regards one or several species, is not forbidden by Scripture, but is as much open for discussion, and investigation, as the natural history of any animal.

That the Zoological classification of man, by his animal properties, excluding his psychical attributes, is unphilosophical.

That there are at least four distinct species of men in the world, proved by their physical and psychical properties and powers.

That although there were several centres of distribution, or creation of animals and vegetables, every known fact proves an original single centre of distribution, or creation, of man, in Asia, in the neighborhood of the Euphrates.

That the progressive development and improvement of the human species in morals and intellect, are laws of human nature, the equivalent of the series of creations antecedent to Man.

That the differences in the races of men cannot be accounted for by climate, mode of living, or any natural causes now in operation, or which have been in operation within the period of history.

That they cannot be accounted for by accidental, or congenital varieties springing up in the human family.

That there is no analogy between man and animals which can assist us to classify man, or to understand his history.

That the principles of zoology, if applied to man in the same manner they are applied to animals, establish specific differences among men.

That the Anatomical and Physiological differences of the races of men establish specific differences.

That the Psychical attributes of man, in every point of view in which they can be considered, constitute specific differences.

That the history and condition of women in the different races establish specific differences.

And lastly—That the natural law of sexual love, by which the races have been kept distinct from time immemorial, establish a distinction of species.

It must be evident to the reflecting mind, from the above enumeration, that the space to be travelled over is vast, and the objects to be exhibited rich and varied. Although specific differences appear, on the face of the statement, to be objects of primary

importance, they are, in fact, subordinate to the general Psychical, Sexual, Anatomical, and Physiological, History of Man, from the earliest to the latest period. We enter on the subject with diffidence; but not without the hope of placing it in such a light, that some more gifted men may be induced to do it justice.

CHAPTER II.

THE INVESTIGATION OF THE NATURAL HISTORY OF MAN IN REGARD TO ONE, OR MANY SPECIES, IS NOT FORBIDDEN BY SCRIPTURE.

When the Church of Rome usurped the authority of keeping the consciences of men, and also usurped civil power to enforce her claim over the Christian world, she could easily suppress philosophical speculations which she thought heretical in doctrine, or adverse to her own principles or power. Happily her day has passed. The only restraints now imposed upon men, in the fullest and freest discussion of any subject, are public opinion, and conscience. We have no hesitation in saying that the revolution, which, humanly speaking, placed the safe keeping of religion in these last, instead of the Pope, has made a more secure deposit for the true interest of the Church, as well as for the best interests of man. In all that a man does, whether as an investigator of any of the sciences, or in the more humble pursuits of private life, he is responsible to these tribunals; but if he should aim at influencing public opinion, he should feel a higher responsibility, in proportion to the importance of the subject, than if his opinions and conduct were limited to his own social circle.

The investigation of the Natural History of Man has, at all times, been a subject of contention between theologians and most of the philosophers who have embarked in it. Nor has it been without good reason that, even in this our liberal day, the clergy have taken up arms against the heterodoxy of many learned men, whose theories of the origin of man are directly opposed to religion. Their theories were not dangerous, though they created alarm, and are now referred to as absurdities of learned, not as plausible theories of ingenious men. Such, we predict, will be the fate of all theories, however ingenious or plausible, opposed to the sacred volume; because it is impossible that any natural facts can contradict the Holy Scriptures, as they are truths of nature, derived from the same All-wise being whose words and works are, and must always be, rigidly and strictly harmonious.

The Bible was not given for scientific instruction. Many of the natural facts it contains, illustrating moral truths, are familiar images of the period; which, to be understood, and appreciated, the reader must transport himself to the scenery and circumstances depicted. But the creation,—the condition of the ante-diluvian world,—the Deluge,—the preservation of Noah and family,—the original settlement of Shinar, as the centre of human distribution, after the flood,—the one speech, and one language, until the dispersion of men from the valley of Shinar,—are truths which do not now depend solely upon the Mosaic history. They have been most surprisingly illustrated by the progress of scientific knowledge. Thus it has hap-

pened that several of the sciences, Astronomy, Chemistry, Geology, and Ethnology, in particular, from which danger was apprehended, have become its most able collateral supporters. From the progress already made in illustrating the truths of Scripture, by the aid of natural science, we may predict the coming of the day, when most of its dark and mysterious passages will be fully explained by the lights of science; and many of the sectarian divisions of Christians be destroyed by the progress of knowledge.

We would not engage in an investigation of the natural history of man, if we thought the subject so closely restricted by Revelation, that the arguments against a unity of the species, must necessarily be arguments against the Scripture. Not to make a parade of a higher veneration for religious truths than is necessary, we hold any man guilty of the highest crime against society, who should attempt to abstract the only cement which binds it together for good, by destroying religious obligations.

Nearly all the authors who have lately written on this subject, have adopted the opinion that all men are of one species. Some have not been avowedly influenced by religious motives for such opinion, however much they may have been influenced by the popular, prevailing sentiment in its favor; while, with others, an honest zeal, in support of Christianity, is the avowed motive to their speculations. "If any person should inquire" says President Smith, Essay, p. 5, "why a writer who has so many other duties to fulfil, more immediately relating to the sa-

cred functions of his profession, should devote so much time to studies which seem only remotely connected with the offices of piety particularly belonging to a Christian minister, I hope it will be a satisfactory answer, that infidelity, driven from all her moral grounds of objection against the Gospel, has lately bent her principal force to oppose the system of Nature to that of Revelation. From natural science, which has been cultivated with more than common ardor and success in the present age, she now forms her chief attacks against the doctrine and the history of religion. And on this quarter she has pressed them with great zeal. While others, therefore, are successfully defending the interior fortresses of religion, and extending her practical sway over the hearts of men, I thought I might render a valuable service to the cause, by co-operating, in some degree, with those who are defending her outworks, and carrying their attacks into the enemies' camp." This carrying the war into Africa was to be done by establishing the "unity of the human species, by tracing its varieties to their natural causes," and thus to "confirm the verity of the Mosaic history." If he had accomplished his design, the subject would be now at rest; but, unfortunately, the most of his arguments are of a kind to favor, rather than vanquish, infidelity.

If "the verity of the Mosaic history" depended on "the unity of the human species" no Christian man would attempt to prove to the contrary. It sometimes happens that the most skilful advocates endanger a cause, by placing it on a false issue. It

must be evident that men who come to the investigation of this subject with minds so prepossessed, are as unfit for it, as are those who engage it with the hope of making it an instrument for the destruction of religion, by adopting the contrary theory. Both of them have theories to maintain. Both seek for facts and reasons to support them, with a zeal which warps their judgments—the first no doubt honestly deceived; the latter, if as honestly deceived, certainly not as honestly employed.

We, on the contrary, entertain the belief that the Mosaic history affords a fair, and very strong presumption, that man was divided into several species, by the Creator. If we should establish this fact we will have done much towards settling this vexed question; for, we imagine, the chief difficulty of the subject has hitherto been a tenderness on this point, which has, more or less, influenced every conscientious inquirer on the subject.

It is universally agreed that the Divine record is addressed as much to the understanding, as to the faith of men; consequently it is open to a fair interpretation. The difficulty in accomplishing this consists chiefly in three things—first, a deficiency of knowledge in the natural sciences, to enable us to understand the operations of God's laws, in regard to His creatures; secondly, fixed notions, by education, a departure from which is regarded as heresy; and, lastly, a peculiar frame of mind, in some men, which causes them to regard the sacred volume as opposed to philosophical investigations.

The first deficiency is now rapidly being sup-

plied. Scarcely a day passes without the discovery of some new scientific truth magnifying the glory of Him, who, by means of a very few simple and invariable laws, controls innumerable systems of worlds, and their component atoms, without confusion. The mind of Man, the "Image of" HIM upon this Earth, is daily expanding, and increasing in capability to understand, and discover, more of the laws of His power, and thus enabled to understand His word. The whole learned world, like a hive of bees, is busy, in ceaseless industry, gathering honey from every open flower, and storing it up for that day when "the earth shall be full of the knowledge of the Lord," as well by reason of his works, as His word. In that day the difficulties in regard to fixed notions, arising from defective education, and the peculiar frame of mind hostile to religion, will disappear; and truth will always be orthodox, because piety and science will be united.

Lawyers have a rule for expounding human laws which, with one exception, is as applicable to the Word of God, as it is to civil enactments. It is that one part of a statute must be so construed that the whole may operate efficiently, if such a construction can be given. But as human laws are sometimes flatly contradictory, the rule is, in such cases, that the last shall be in force, and the first void. Such can never be the case with a Divine law; and, therefore this part of the rule is inapplicable to it. In the Divine law there can be no contradiction; because every thing which proceeds from Jehovah must be perfect. Therefore, any apparent contradiction ap-

pears so, merely because we do not understand, what, at some future day, with more knowledge, we may understand perfectly.

From the first to the sixth chapter of Genesis, inclusive, embracing the whole ante-diluvian period, the Mosaic history, though short, is comprehensive. There are parts of it, however, which are not easily reconciled together, by the customary construction of these chapters. The universal construction is that Adam and Eve were the first and only created human beings in the world; but Moses does not say that such was the fact, although he gives us the history of no others, and leaves us free to judge, from other parts of Genesis, whether they were others or not. He positively assures us that Adam and Eve were the only human beings *placed in the garden of Eden*; and were therefore the only chosen of the Lord: and after they had sinned, and were driven out of Eden, the inference is fair, that there were no other inhabitants in the place to which they were driven; and that the presence of the Lord attended Adam after his expulsion in an especial manner. Because, when Cain was cursed and was made "a fugitive and vagabond" for slaying Abel, he "said unto the Lord—My punishment is greater than I can bear. Behold thou hast driven me out this day from the face of the earth; *and from thy face shall I be hid;* and I shall be a fugitive and a vagabond in the earth; and it shall come to pass that every one that findeth me shall slay me. And the Lord said unto him—Therefore, whosoever slayeth Cain vengeance shall be taken of him seven-fold. And the Lord set

a mark upon Cain lest any finding him should kill him. And Cain went out from the presence of the Lord and dwelt in the land of Nod, on the east of Eden."

Adam, at the time Cain slew Abel, had only these two children; consequently, Abel being slain, Adam and Cain were the only two men in the world, if Adam was the first and *only* creation of human beings. If such were the case the fear of Cain "that every one that findeth me shall slay me," must have been wholly groundless: and the reply of the Lord, that "whosoever slayeth Cain vengeance shall be taken on him seven-fold," was at least unnecessary. Nor could there be any necessity for putting a mark upon him, "lest any finding him should kill him." For if there were no human beings then in the world but Adam, Eve, and Cain, would he not be sufficiently known to them without a mark? And would he not have been sufficiently protected from them, and their future descendants, by being driven out a "fugitive and a vagabond?" It may also be asked, if Adam and Eve were the only created human beings, at that time, where did Cain get his wife, which he had in the land of Nod? He took none with him, when he "went out from the presence of the Lord;" and yet in the next verse, after his departure, we are told that "Cain knew his wife and she conceived, and bare Enoch." She could not have been a daughter of Adam and Eve, for they had no daughters until after the birth of Seth, who was born after Cain's son Enoch.

Such are the facts. How can they be reconciled?

Dr. Good, in his "Book of Nature" pp. 219, 20—says that Isaac Peyrere, librarian to the Prince of Condé, "about the middle of the last century, contended, in a book which was, not long afterwards, condemned to the flames, though for other errors in conjunction with the present, that the narration of Moses speaks expressly of two distinct species of men,—an elder species which occupied a part of the sixth day's creation, and is related in the first chapter of Genesis; and a junior, confined to Adam and Eve, the immediate progenitors of the Hebrews, to whom this account was addressed; and which is not referred to till the seventh verse of the second Chapter, and even then without any notice of the exact period in which they were formed. After which transaction, observes this writer and those who think with him, the historian confines himself entirely to the annals of his own nation, or of those which were occasionally connected with it. Neither is it easy, they adjoin, to conceive, upon any other explanation, how Cain, in so early a period of the world as is usually laid down, could have been possessed of the implements of husbandry which belonged to him; or what is meant by the fear he expressed upon leaving his father's family, after the murder of Abel, that every one who found him would slay him; or again, his going into another country, marrying a wife there, and building a city soon after the birth of his eldest son."

We agree with Dr. Good, that to account for these difficulties by a construction that the Mosaic account records two distinct creations, is altogether unwar-

ranted. The clear construction of the whole narrative relates only to one creation, of one human pair. The implements of husbandry possessed by Cain are of no importance in the consideration of the question; for it is not necessary to suppose there were artificers, whose business it was to make tools for agriculture. When Adam was driven from Eden, "to till the ground from whence he was taken," the benevolence of God, no doubt, instructed him in the elementary knowledge and skill necessary to fulfil his destiny. But the remainder of Dr. Good's arguments on the above theory are entirely supposititious, and contrary to the letter of Moses's narrative. "It should be recollected," says he, "that this first fall of man by the hand of man, did not take place till a hundred and twenty-nine years after the creation of Adam: for it was in his one hundred and thirtieth year, that Seth was given to him in the place of Abel: an interval of time amply sufficient, especially if we take into consideration the peculiar fecundity of both animals and vegetables in their primeval state, for the multiplication of the race of man, to an extent of many thousand souls."

This is entirely a supposition, opposed not only to the letter, but the spirit of the narrative, that the murder of Abel took place in the "hundred and twenty-ninth" year of the creation; because it may have happened much earlier. The birth of Seth, in the one hundred and thirtieth year of the creation, furnishes no argument that the murder of Abel took place the year before. The murder of Abel must have been much longer antecedent to the birth

of Seth, than one year; because the departure of Cain to the land of Nod, his marriage, the birth of his son, Enoch, and the building of the city, are events which took place prior to the birth of Seth.

Of a like nature is the supposition of the Doctor, that the interval of the time, from the creation of Adam to the murder of Abel, "was amply sufficient, especially if we take into consideration the peculiar fecundity of both animals and vegetables in their primeval state, for the multiplication of man, to the extent of many thousand souls." Ante-diluvian life was many times as long as it is at present; but the presumption is sustained by the Divine record, that adolescence was proportionably protracted. From all the facts disclosed in Genesis, and from the well-established truth that longevity bears a proportion to the growth to maturity of all organisms, adolescence could not have been short of sixty to seventy years during the Adamic period. So far from having any ground for the supposition of "the peculiar fecundity" of the period for the multiplication of man," all the facts lead to the belief that man was not then more prolific than he is now. Methuselah was one hundred and eighty-seven, Lamech, one hundred and eighty-two, and Noah five hundred years old, before they had a child. Noah and his sons are the first families whose male descendants are wholly enumerated. Noah had three sons; Japheth, seven; Ham, four; and Shem, five; which is a fraction under five for each of these patriarchs, which certainly does not mark a "peculiar fecundity." Adam and Eve were created in a state of maturity; and granting that

Cain and Abel were born at the earliest possible period, and were married immediately on arriving at adolescence, their children could not all have arrived at a marriageable age when Adam was one hundred and thirty years old, on the birth of Seth. But Abel was slain, and Cain an outcast, before either was married. The supposition therefore, of Dr. Good, that "many thousand souls" may have been born, prior to the birth of Seth, or rather prior to the departure of Cain "from the presence of the Lord," is clearly contrary to the inspired narrative. The question, therefore, returns upon us, how can this apparent difficulty be explained?

The rule of construction we have given, requires that the whole of Revelation must be so construed that every part shall have effect, and no part be abrogated. In the sixth chapter of Genesis a distinction is made between the "Sons of God," and the children of "men," which, if it were not for the circumstance of "giants in the earth in those days," might refer to the descendants of Adam and Seth, as distinguished from Cain and his descendants; but these men, or "giants" cannot, without an improbable supposition, be referred to Cain, as their progenitor; because four generations, from Cain are mentioned, among whom were no giants; and these are sufficient to cover the whole intermediate time. The intermarriage of "the Sons of God" with "the daughters of men," was the cause of the flood; or rather the cause of the universal wickedness which brought on the flood.

Thus, then, the fear of Cain, "that every one that

findeth me shall slay me;"—his marriage in the land of Nod, before Adam and Eve had daughters;—the men, and giants, of these days, as distinguished from the "Sons of God," and the wickedness which prevailed among them,—all appear to point to a race of human beings, prior to the creation of Adam and Eve.

The question may be asked, if there were human beings created before Adam and Eve, why did God create Adam and Eve? Whether such a question should be satisfactorily answered, or not, will not affect the facts above detailed. It might be replied that infinite wisdom saw proper so to do, and this reply would be sufficient. That satisfactory reasons cannot be given, to solve all the mysteries of God's providence, is certainly no reason why the facts he thought proper to disclose to us should be discredited. Why did God permit our first parents to fall? Why suffer Cain to slay Abel? Human reason would be at fault to account for either. Although, therefore, it is not important to assign the reason for the creation of Adam and Eve, after God had created other human beings, yet some sufficient reason might be imagined, agreeably to the narrative of Moses, and having at least its implied sanction.

We have already said that the children of men and of "giants in those days" were so wicked "that every imagination of the thoughts of his heart was only evil continually;" and that this state of wickedness was brought about by the marriage of the "Sons of God" with "the daughters of men." If the sins of men, at a subsequent period, were of

sufficient importance for the Son of God to assume our nature, it is certainly not too much to suppose, that the sins of men, before the creation of Adam, were of sufficient importance for his creation in the moral "image" of God, as an example to such sinners, and for their reformation. The descendants of Adam were called "the Sons of God," not only to distinguish them from the children of men and giants, but, probably, because they were created in the moral and intellectual image of God. This likeness could not be intended to signify a personal or physical similarity; for God, being a Spirit, and man corporeal, there cannot be a similarity of persons; but it must have been a moral, and, being intended for a free-will agent, an intellectual likeness. In these respects, therefore, the new creation formed an intermediate link between the corrupt and vicious men previously existing, and the Savior; and was, possibly, necessary in the great scheme of salvation which he came to proclaim. This moral and intellectual likeness has been preserved by the descendants of Adam: preserved by Noah and family from the flood; preserved by the Jewish nation, from the time of Abraham, until the birth of our Savior; and, lastly, preserved by the Shemitic, or white, species since that period.

Three strong objections oppose themselves to this construction of Revelation, viz.: First, Moses mentions no other creation, and therefore it is fair to presume there was none. It is true he does not expressly mention it, but he does not deny it, and the whole tenor of Revelation implies it. That

Moses was confined, in his history, to Adam and Eve, they being the only beings placed in the garden of Eden, which is typical of the future condition of the earth when "all shall know the Lord," is not surprising. The Revelation, as detailed, was quite sufficient for the necessary religious instruction of man; but it is not, for this reason, improper to investigate it, provided we do not violate its spirit or sense.

The second, and a yet stronger objection to this construction is, that if the world, and all its furniture, was created in six days, there was no time for wickedness to have prevailed, so extensively as to require the new creation of Adam and Eve, as a remedial measure.

It is not our object to enter upon the discussion of the question in regard to the days of creation, whether they are to be regarded as natural days, or indefinite periods. Many able and pious men, such as Dr. John Pye Smith, Professor Silliman, and many others contend that they were indefinite periods, or periods of six thousand years. We are inclined to a contrary opinion, and believe that the days of creation were natural days; though we confess that before the fourth day there were no lights in the firmament of the heaven, to "divide the day from the night;" and to "be for signs, and for seasons, and for days, and years;" but we do not regard those who entertain a contrary opinion, as impairing the authenticity of the inspired author. If these learned men are correct, in their speculations respecting the demiurgic days, it will be evident that there was not

only time, but may have been an occasion for the creation of Adam and Eve, after the other creation alluded to by Moses.

But if our construction of Genesis is correct, we are not bound to find reasons to sustain it. The facts remain the same whether we furnish reasons for them, or not. If there were children of men and giants in those days, which Moses tells us there were, who were not of the race of Adam, we are bound to believe the fact, although he says nothing about the time when, or how, they were created. If the creation of Adam and Eve was a remedial measure, by the All-wise Creator, to remedy the vices of the people then in being;—and Adam and Eve were made in the image and likeness of God, for this purpose; and the more important purpose of furnishing a proper line of beings, through whom God himself was, at a future time, to be born upon the earth, as the greatest of all remedial measures,—we can see that it was not important to disclose to Moses any more of the creation of that period than what immediately related to Adam, as the progenitor of the Savior.

The third important objection is, that, suppose such a creation to have taken place, the Deluge, which took place subsequently, destroyed all human beings, except Noah and his family; and therefore all the people now in the world, are derived from Adam, through Noah.

If the creation of Adam and Eve was a remedial, as the Noachian flood was a punitive measure, the same reasoning is applicable to both; that is, the

creation, recorded by Moses, was the particular creation, which took place on a particular spot of the earth, as the subsequent Deluge also prevailed over that quarter which was inhabited by the children of that creation. The sins, which caused the Deluge, were the sins of the children of Adam intermarrying with the daughters of men; by reason of which "all flesh had corrupted his way upon the earth." They were then residents of Asia, probably near or about the Euphrates; consequently, it was not necessary that the punishment of the Deluge should be more extensive than the prevalence of the wicked beings who had become corrupt. If, therefore, there were other men in the world besides Adam and his descendants,—and if the Deluge did not prevail over all parts of the Earth at the same time,—it follows, that, although all the descendants of Adam, except Noah and family, were destroyed, there may have been others, in other parts of the earth, who escaped.

We will not consume time with a farther examination of this subject, as we place no reliance upon it for our future investigations. Our design in introducing these views at all, is to show that the subject is open to a full investigation, upon broader principles than we will claim. Those who are desirous of examining the arguments, in relation to the limited extent of the Deluge, will find them admirably and fully stated by Dr. John Pye Smith in his interesting work *on the relation between the Holy Scriptures and some parts of geological science.*

We have already said, that the object of introducing the foregoing speculations, is to show, that the

subject is fairly open to a wider range of investigation than is generally supposed, or than we will claim; because we are ready to admit, that the whole human family sprang from Adam; and that the whole race, except Noah and family, was destroyed by the Deluge; and, consequently, that all the human family have since sprung from three men, as it before had from one. And yet, notwithstanding, we shall think it no heresy to assert, that all men are not of the same species, nay, more, we apprehend, that those who assert the contrary are more obnoxious to such a charge.

We take it for granted that men believe that when the Almighty promises, asserts, or curses, that they will be fulfilled. The sons of Noah were not all equally favored by the Almighty. Shem was especially blessed, and made the progenitor of the Israelites, and of our Savior.—Japheth was promised to be enlarged;—and Canaan the son of Ham, was cursed, and made a servant of servants. The son of Abraham, by Hager, Ishmael, was driven out from his patrimony, but was to increase and multiply exceedingly, and to be "a wild man," whose "hand shall be against every man, and every man's hand against him." Thus we have four distinct blessings, promises, and curses, pronounced upon the patriarchs of the human family; which were, no doubt, to be typical of their descendants. How were they to be fulfilled? The races must be kept distinct, or they could not be fulfilled. The difficulty with the descendants of Adam, was, that "they saw the daughters of men, that they were fair; and they took them wives of all

which they chose." How then could they be kept separate. The blessings, promises and curses, must have been followed by some physical change of the parties, or intermarriages would soon obliterate the individuality of each, and make them all of a like nature, and of similar descent. Nor would it answer the purpose to depend upon the memories of the parties, at all times, to know,—nor their fidelity to observe, if they should know,—the descendants of each progenitor. Nothing less than a physical change,—a change of color,—of features,—of manners, habits and mental qualities,—could with certainty operate as an effectual separation. A mere geographical separation, if there were no physical distinction, would only amount to a temporary sepation; because the migratory habits of man would soon bring them together. But a geographical separation, together with a physical distinction, would make, as it has made, an almost perfect barrier to an amalgamation of the different species. Thus the promises, curses, and blessings, upon the patriarchs, as types of the several species of mankind, could be literally fulfilled in the descendants of each typical patriarch.

Thus is the question of the species of men as fully open to philosophical inquiry, as any subject of natural history can be. We might almost say that Revelation has decided that there are several species of mankind, and that to believe to the contrary, is to disbelieve the power of God to modify specifically, by the word of his power, beings whom he created by no greater effort. When we reflect that these

specific differences have prevailed from the earliest traditionary, as well as historic period (excluding Revelation), we must suppose the specific modifications to have taken place about the time the occurrences related by Moses took place. Noah and family must have been white, because the Israelites, who are known to have descended in a direct line from him, are so; and as the different species, precisely as they now exist, can be traced up by tradition and profane history very near to the period of the lives of the typical patriarchs, we are bound to believe that these, together with a geographical separation, which was afterwards made, were the great barriers which God made instrumental in carrying out his designs in regard to his creatures.

This subject will receive frequent illustrations in the progress of our investigations, which we do not wish to anticipate; but we thought it due to our readers to state distinctly the ground upon which our investigations rest, which, if not solid, will not support the building we have constructed.

There is yet another view of the subject, which is conclusive. Merely as a zoological subject, the Natural History of Man is wholly disconnected with his origin. The single questions for the consideration of the naturalist are, whether he has certain specific, generic, or other zoological characteristics; and whether they have been preserved from generation to generation, for a time sufficiently long to justify a reasonable conclusion that they are permanent in the race. If it could be proved that the whole feline family sprang from a single pair of cats, preserved

with Noah; which. soon after having been set at liberty from the ark, by the operation of some causes then prevalent, but long since exhausted, improved, or degenerated into all the known species of history, we apprehend it would not disturb a single zoological family, as now established.

This view of the subject will be noticed more particularly hereafter. We only mention it now to put the reader in possession of the whole ground upon which the liberty to discuss the question rests. We have not adopted this view as the basis of our history; not because we think it untenable, but because we think we can sustain ourself upon Scriptural ground, with benefit to some sceptics; and that some kindred sciences may be benefited by taking Scriptural names for classification.

CHAPTER III.

THE CLASSIFICATION OF MAN AND THE PROPER NAMES OF THE SPECIES.

The names by which things are designated are of much importance. Not that the name must always signify, by the clear etymological import of the word, the thing to be designated,—a thing always desirable when it can be done; but that it should designate the thing distinctly from others, even if the name should be arbitrarily chosen. The importance of a clear distinction of things, by the names applied to them, cannot fail to have impressed every one familiar with the violent contests which have taken place in the learned world, which might have been avoided if the word expressing the idea had been clearly understood between the parties.

The names hitherto used by philosophers in treating of the Natural History of Man, are not sufficiently distinct in their significations to avoid a confusion of ideas, and are therefore objectionable. Cuvier's and Blumenbach's divisions and names are generally followed. Cuvier divides all mankind into three varieties, and calls them Caucasian, Mongolian, and Ethiopian; Blumenbach retains the Caucasian and Mongolian, but subdivides the Ethiopian into the American, Negro, and Malay, making five varieties of mankind. If authors had used these words

technically, to express the single idea that these geographical names were only to be understood as typical of the races, they would not be objectionable. Such has not been the fact; for they either directly say, or leave an unavoidable inference on the mind, that, by the use of these words, they desire to be understood that the different races sprang up, or originated in the countries the names of which are given to them. In this sense these geographic names are objectionable; because they take for granted that permanent races of men may originate from other causes than by the creation of God,—by climatic influences, or accidental generation,—as though it was an ascertained fact that such things had taken place. Besides they are either too limited or too extensive. Too limited in referring all the white varieties of men to a Caucasian, all the yellow varieties to a Mongolian, and all the black varieties to an Ethiopian, origin; and too extensive, by embracing all the Africans as blacks, Blumenbach's division of the Ethiopian race into three varieties, while it obviates the objection to Cuvier's Ethiopian division, takes for granted what is not yet settled,—that the Americans and Malays are distinct races. Whether the aborigines of America are of one or many races, or a distinct race at all, is a contested matter. Whether the Malays are a distinct race, a variety of the Negro, or of the yellow race, is not yet settled. Besides, the reasons which governed Blumenbach in dividing the Ethiopian, should have directed him also to divide the Caucasian variety; because a latitude has been given to this name, by which it has been made to

embrace one half of Asia, by a line drawn north and south, from the eastern limits of Afghanistan; giving nearly all the nations and tribes west of this line to the Caucasians, and all east of it to Mongolians. A geographic division embracing nations and tribes so remarkably dissimilar, that, if it is true, it shows, conclusively, that a science upon which so much talent and industry have been expended is of very little practical value, however much it may amuse the learned. The word Caucasian is also objectionable because it is not emblematical of the white races in the progressive development of the mind, although it may be in regard to complexion and features. The name Mongolian is, on every account, still more objectionable than that of Caucasian. It is the name of a nation of robbers, in eastern Central Asia, who are, for anything we know, a people of yesterday, compared with the Chinese, Japanese, and part of the Hindus. The Chinese, in particular, are the oldest nation upon the earth, having undergone fewer vicissitudes from invasion, or change of manners and customs. Excluding their own histories, which extend back with considerable certainty for two thousand years before our era, we know from the Roman history, that, in the first century of the Christian era, they were precisely the people they are now. That these very populous and ancient nations were originally derived from a nation of pastoral wanderers and robbers of Central Asia, appears to be so highly improbable, that we should rather suppose that China, pressed by population, or the intestine wars which prevailed about

Confucius's time, poured forth the surplus from her own bosom, and that they degenerated by the expulsion, if they were not so before. However this may be, and although the features, and other physical characteristics of the Mongols and Chinese do approximate, yet the manners, habits, customs, and propensities of the two people are so very dissimilar, that we feel some reluctance in designating these peaceable, contented, unambitious, and industrious people, by a name which is synonymous with everything destructive and cruel.

The name of Mongolian is also objectionable by reason of its uncertainty. Writers frequently use it very loosely. Sometimes a latitude is given to it embracing almost all of the Tartars, many of whom are as distinct, in every respect, from the true Mongols, as these are from the Caucasians. "The Tartars," says Malte Brun, "differ as much from the Mongols, in their features, physical constitution and language, as the Moors do from the Negroes. A slender figure, an European visage, though somewhat yellow in complexion, curled hair and long beard, distinguish the Tartar from the squat, shapeless monster, with a flat nose, prominent cheeks, almost beardless chin, and lank hair, who inhabits the deserts of Mongolia. The countries of these two races of men constitute two distincts physical regions. The Mongols, of whom the Calmucks are a branch, occupy all the central plateau of Central Asia, from the Beloor Mountains and lake Palcati to the great wall of China, and to the Siolki Mountains which separate them from the Mantchoos, a tribe of the great race of the Ton-

gooses. The Tartars are the possessors of that extensive country which lies between the Beloor Mountains on one side, and the lake Aral, and the Caspian Sea on the other."

Dr. Prichard's proposed nomenclature is more objectionable than either of the others. By dividing the races of men by the color of the hair into Melanic, Xanthous, and Albino, he has, in effect, made but two divisions of the human family; because the Albino is not a variety in a scientific sense. It is an accidental, not a uniform production, similar to mutes, the porcupine family, six-fingered and toed people, &c., who never constitute a race, but disappear in a few generations.

His two chief divisions, Melanic and Xanthous, particularly the first, are objectionable for want of that certainty which names should always possess. At least seven tenths of mankind are black haired; embracing a majority of Europeans, and nearly all of the remainder of the human family. A variety including so large a sweep of nations, differing in everything but the mere color of the hair, is far too indefinite to answer a useful purpose; because it leaves out of view those peculiar distinctive characteristics which give point and value to science, unless many subdivisions should be made, each more important than the primary division, and therefore better entitled to a primary position. His Xanthous division is liable to the same objections, though not to the same degree.

Other divisions have been made, by other authors of less note than these, which we pass without notice.

From choice, therefore, as well as necessity, we adopt a new nomenclature; from choice, because we do not approve of the names heretofore used; and from necessity, because our views upon the subject are so different from any previously expressed, that we are compelled to seek new appellations, or to modify the old names to suit our views of the subject.

"The peculiar characteristics of man," says Laurence in his Lectures, p. 117, "appear to me so very strong that I not only deem him a distinct species, but also put him into a separate order by himself. His physical and moral attributes place him at a much greater distance from all orders of mammalia, than those are from each other respectively."

Borrowing his language, we say that the peculiar characteristics of man appear to us so very strong, that we not only deem him a distinct order of animals, but also put him into a separate *class* by himself. His *psychical* or *spiritual* attributes place him at *a much greater distance* from all classes and orders of instinctive mammalia, than these are from each other respectively.

To arrive at a proper zoological classification of man, it is necessary to divide the class mammalia into two sections. The first section we call Psychical or Spiritual Mammalia; and the second we call Instinctive Mammalia.

This separation of Man from the Animal Kingdom is absolutely necessary; for however near, in appearance, and in spiritual character, the most perfect ape may approach to the lowest and most sen-

sual Negro, in the opinion of some persons, yet the peculiar attributes of such a negro remove him wholly beyond the limits of all animals, by a wider gape, than he is, compared with a Newton.

His zoological characters will be as follows, viz.:

First Section.—Psychical, or Spiritual Mammal.

Order.—Bimanum, or two-handed.

Genus.—Homo, or Man.

Species Four.—Shemitic, Japhethic, Ishmaelitic, and Canaanitic, each containing several varieties.

Generic Characters.—Psychical. Erect stature; two hands; teeth approximated and of equal length; the inferior incisors perpendicular; prominent chin; endowed with speech; unarmed; defenceless.

We have already given to our readers some reasons for our classification, and others will be found in our future progress. We are only responsible for the Class and Species, the Order and Genus being taken from others.

We proceed to give the Specific characters.

First.—The Shemitic Species.

Psychical, or Spiritual Character, viz.:

All the Psychical Attributes developed harmoniously.—Warlike, but not cruel, or destructive.

Temperament.—Strenuous.

Physical Character, viz.:

A high degree of sensibility; fair complexion; copious, soft, flowing hair, often curled, or waving; ample beard; small, oval,

perpendicular face, with features very distinct; expanded forehead; large and elevated cranium; narrow elevated nose, distinct from the other features; small mouth, and thin lips; chin, round, full, and somewhat prominent, generally equal with the lips.

Varieties.—The Israelites, Greeks, Romans, Teutones, Sclavons, Celts, &c., and many sub-varieties.

SECONDLY.—The Japhethic Species.

Psychical or Spiritual Character, viz.:

Attributes unequally developed. Moderately mental—originative, inventive, but not speculative. Not warlike, but destructive.

Temperament.—Passive.

Physical Character, viz.:

Medium sensibility; olive yellow complexion; hair thin, coarse, and black; little or no beard; broad, flattened, and triangular face; high, pyramidal, and square-shaped skull; forehead small and low; wide and small nose, particularly broad at the root; linear and highly arched eyebrows; very oblique eyes, broad, irregular, and half-closed, the upper eyelid extending a little beyond the lower; thick lips.

Varieties.—The Chinese, Mongolians, Japanese, Chin Indians, &c.; and probably the Eskimaux, Toltecs, Aztecs, Peruvians.

THIRDLY.—The Ishmaelitic Species.

Psychical or Spiritual Character, viz.:

Attributes generally equally developed. Moderately mental; not originative, or inventive, but speculative; roving, predatory, revengeful, and sensual. Warlike and highly destructive.

Temperament.—Callous.

Physical Character.—Sub-medium sensibility; dark skin, more or less red, or of a copper color tinge; hair black, straight, and strong; face broad, immediately under the eyes; high cheek-bones; nose prominent and distinct, particularly in profile; mouth and chin, European.

Varieties.—Most of the Tartar and Arabian tribes, and the whole of the American Indians, unless those mentioned in the second species should be excepted.

FOURTHLY.—The Canaanitic Species.

Psychical or Spiritual Character, viz.:

Attributes equally undeveloped. Inferiorly mental; not originative, inventive, or speculative; roving, revengeful, predatory, and highly sensual; warlike and destructive.

Temperament.—Sluggish.

Physical Character.—Sluggish sensibility, approaching to torpor; dark or black skin; hair black, generally woolly; skull compressed on the sides, narrow at the forehead, which slants backwards; cheek-bones very prominent; jaws projecting; teeth ob-

lique, and chin retreating, forming a muzzle-shaped profile; nose, broad, flat, and confused with the face; eyes prominent; lips thick.

Varieties.—The Negroes of Central Africa, Hottentots, Cafirs, Australasian Negroes, &c.; and probably the Malays, &c.

Having given the reasons which induced us to reject the nomenclature of others, we feel under some obligation to give some reasons for adopting those we have substituted.

Ethnologists have divided languages into Shemitic, Hamitic, and Japhethic; and with much ingenuity, have endeavored to trace the tongues of Europe, Asia, and Africa, to these original stems. Much of the foundation for such a division of languages is fanciful, as we shall hereafter see; because the whole of the affiliations of languages to the supposed patriarchal tongues, must depend upon the correctness of the locations assigned to these patriarchs, and therefore depend chiefly, if not altogether, on the authority of Josephus. We will presently endeavor to ascertain what dependence should be placed on his authority. But in the mean time we make use of the fact, that the original languages from which the present tongues are supposed to have been derived, are named from the patriarchs who were the post-diluvian progenitors of the present races of men; which shows that men of learning have adopted, in regard to language, the nomenclature we propose to adopt in the Natural History of Man.

It would be of much advantage to Ethnology to

have the nomenclature of the species of men fixed in harmony with sacred and profane history, if it can be done with any reasonable precision; because in such case, it would follow, almost as a matter of course, that the original number of languages, either radically distinct, or dialectically different, should correspond with the number of original species. We can see no reason why they should exceed this number; for, as we will hereafter see, each species migrated as a whole, by itself, in mass, and in one direction, the presumption must be, that, originally, they had a common tongue, which gradually changed as they located under different circumstances. There are many circumstances which raise a strong probability, to say the least of them, that the language of Noah and family was the primitive stem of all the tongues of the world: and, consequently, that the confusion, at Babel, was only dialectic. Among the most important of these circumstances is the universal prevalence of many important words, in all languages, however distant or different may be the people. If the species should be determined, it would certainly determine that the different languages, either as radically distinct, or idiomatically different, as we have said, could not exceed the number of species: consequently it would only be necessary to determine what the original tongue of each species was, to trace with considerable precision, the different nations of men to the parent stock. If the languages were radically different it could be done with greater ease and certainty; if dialectically different only, it would require greater skill and caution.

For example—suppose we admit that the Abrahamic language was the original Noachian stem ;—that the Japhethites were confounded, at Babel, by a distinct language, or a different dialect; and that the Canaanites had another distinct tongue, or different dialect given to them; that the Hamo-Shemites spoke the Abrahamic, as did also the Ishmaelites, whose dialects underwent changes by the different circumstances under which they were placed by their migrations. We should thus obtain important facts which would enable the Ethnologist to fix upon standards, which would give to his labor a high degree of probability, if not certainty. Our nomenclature, therefore, has the advantage of harmonizing better with the circle of sciences, as well as with sacred and profane history, than Caucasian, Mongolian, Ethiopian, or any other which has been proposed.

But something is due to the authority of the sacred volume on this subject; for although we would not, on ordinary occasions, make it a party in scientific investigations, neither do we see the propriety of rejecting it in those matters about which it speaks directly to the point. If Moses, instead of being a sacred, were a profane historian,—if he had written in the Chinese, Zend, or Sanscrit tongue, and some other theory were annexed to the Bible,—how freely would he be taken by the learned, to prove the facts he details? What an array of facts could be brought from modern sciences, from the ancient mythologies, histories, and traditions, to prove his history to be right, and the history in the Bible to be wrong? The ship of Isis, and the mysteries of the navicular shrines,

which prevailed over the ancient world;—the name of Baris, given to the shrines and vessels, which, says Bryant, quoting from Nocolas Damascenes, was the name of the mountain on which the ark of Noah rested;—the ancient glory of Babylon, attested by ancient authors, and the immense ruins (among them the "Bhirs Nimrod") which constitute mountains of rubbish on its site;—the traditionary and historical evidence of the derivation of nations, arts, letters, and sciences, from the Euphratic plains;—the proofs derived from modern sciences to support the Mosaic history;—and many other facts which will be made to appear in our future investigations, would so variously and so strongly support the Mosaic history, that it would enforce respect and belief, against the inclination of conscientious men, who were inclined to adhere to the history we have supposed to be in the Bible. We do not pretend to say that these facts prove Noah's flood as circumstantially as the Revelation to Moses; but it often happens that circumstantial evidence, corroborating a direct witness, is of a higher character, and better entitled to belief, than if related in the same words, and agreeing in every particular detail. Of this nature is the testimony we have enumerated, none of which can be suspected of bias, influence, or partiality for the Mosaic history.

We therefore confess that we have selected our nomenclature from this history, because we believe it to be true.

But another difficulty presents itself to our classification, which requires attention.

We have assigned the white, or Caucasian species of men to Shem; the yellow species, or Mongolians, to Japheth; the red species to Ishmael; and the black, or Ethiopians, to Canaan. This disposition of the species of men is so contrary to the current of authorities, from Josephus to the latest commentators on the Scriptures, that we felt some reluctance in adopting it. We might easily have avoided the difficulty, and the discussion, either by making our nomenclature conform to the weight of authority, or by adopting some other not encumbered with the difficulty. For instance, if we had ascribed the descent of Europeans from Japheth; the Syrians, Assyrians, Persians, Jews, &c., from Shem; the Bedouins, Tartars, &c., from Ishmael; and the Negroes from Cush, we would have the weight of authority in our favor. But after the best investigation we could give to the subject, we came to the clear conviction, that such a disposition of the species is neither supported by the Bible, by profane history, nor by any circumstances which must have attended the original dispersion of mankind. We have, therefore, adhered to our own views for reasons which we will present in the progress of this chapter.

Fortunately for us, the numerous and powerful array of antagonists to our nomenclature may be all traced to the single authority of Josephus, without the slightest addition, or variation of proof: consequently he may be regarded as our only antagonist.

That the merits of the question may be fairly before our readers, we give the following extract from Josephus, Book I. Chap. 6.

"Japhet, the son of Noah, had seven sons. They inhabited so, that beginning at the mountains Taurus and Amanus, they proceeded along Asia, as far as the river Tanais, and along Europe to Cadiz; and settling upon the lands they lighted upon, which none had inhabited before, they called the nations by their own names. For Gomer founded those whom the Greeks now call *Galatians* (Gaults), but were then called *Gomerites.* Magog founded those that from him were named *Magogites*, but who are called by the Greeks *Scythians.* Now as to Javan and Madai, the sons of Japhet; from Madai came the Medeans, which are called *Medes* by the Greeks; but from Javan, Ionia and all the Greeks are derived. Thobel founded the Thobelites, which are now called *Iberes;* and the Mosocheni were founded by Mosoch; they are now called Cappadocians. There is also a mark of their ancient denomination still to be showed; for there is even now among them a city called Mazaca, which may inform those that are able to understand, that so was the entire nation once called. Thiras also called those whom he ruled over *Thirasians.* And so many were the countries that had the children of Japhet for their inhabitants. Of the three sons of Gomer, Aschanaz founded the Aschanasians, who are now called by the Greeks *Rheginians;* so did Riphath found the Ripheans, now called *Paphlagonians;* and Thrugramma, the Thrugrammeans, who, as the Greeks resolved, were named *Phrygians.* Of the three sons of Javan also, the son of Japhet, Elisa gave name to the Elisians, who were his subjects; they are now the Æolians.

Tharsus to the Tharsians, for so was Cilicia of old called; the sign of which is this, that the noblest city they have, and a metropolis also, is Tarsus, the *Tau* being by change put for *Theta.* Cethimus possessed the island Cethima; it is now called *Cyprus;* and from that it is, that all islands, and the greatest part of the sea coasts, are named Cethium by the Hebrews; and one city there is in Cyprus that has been able to preserve its denomination; it is called *Citius* by those who use the language of the Greeks, and has not, by the use of that dialect, escaped the name of Cethium. And so many nations have the children and grandchildren of Japhet possessed. Now when I have premised somewhat, which perhaps the Greeks do not know, I will return and explain what I have omitted; for such names are pronounced here after the manner of the Greeks, to please my readers; for our own country language does not so pronounce them. But the names in all cases are of one and the same ending; for the name we here pronounce *Noeas,* is there Noah, and in every *case* retains the same termination."

"The children of Ham possessed the land from Syria and Amanus, and the mountains of Libanus; seizing upon all that was on its sea coasts, and as far as the ocean, and keeping it as their own. Some, indeed, of its names are utterly vanished away; others of them being changed, and another sound given them, are hardly to be discovered, yet a few there are, which have kept their denominations entire. For of the four sons of Ham, time has not at all hurt

the name of *Chus;* for the Ethiopians over whom he reigned, are even at this day, both by themselves and by all men in Asia, called *Chusites.* The memory also of the Mesraites is preserved in their name: for all we who inhabit this country call Egypt *Mestre,* and the Egyptians Mestreans. Phut also was the founder of Lybia, and called the inhabitants Phutites, from himself. There is also a river in the country of the Moors which bears that name; whence it is that we may see the greatest part of the Grecian historiographers mention that river and adjoining country, by the appellation of Phut; but the name it has now has been by change given it from one of the sons of Mestraim, who was called *Lybyos.* We will inform you presently what has been the occasion why it has been called Africa also. Canaan, the fourth son of Ham, inhabited the country now called *Judea,* and called it from his own name *Canaan.* The children of these four were these; Sabas, who founded the Sabeans; Evilas, who founded the Evilians, who are called *Getuli;* Sabathes founded the Sabatheans; they are now called by the Greeks Astaboreans; Sabactus settled the Sabactens; and Ragmus the Ragmeans; and he had two sons, the one of which, Judadas, settled the Judadeans, a nation of the Western Ethiopians, and left them his name: as did Sabas the Sabeans. But Nimrod, the son of Chus, stayed and tyrannized at Babylon, as we have already informed you. Now all the children of Mesraim, being eight in number, possessed the country from Gaza to Egypt, though it retained the name of one only, the *Philestim,* for the

Greeks called part of that country *Palestine.* As for the rest, Ludiem, and Enemim, and Labim, who alone inhabited in Libya, and called the country from himself; Nedim, and Pethrosim, and Chesloim, and Cephthorim, we know nothing of them besides their names; for the Ethiopic war, which we shall describe hereafter, was the cause that those cities were overthrown. The sons of Canaan were these: Sidonius, who also built a city of the same name; is called by the Greeks Sidon; Amathus inhabited in Amathine, which is even now called Amathe by the inhabitants, although the Macedonians named it Epiphania, from one of his posterity; Arudeus possessed the island Aradus; Arucus possessed Arce, which is in Libanus. But for the seven others, Chetteus, Jehuseus, Amorreus, Gergeseus, Eudeus, Sineus, Samareus, we have nothing in the sacred books but their names, for the Hebrews overthrew their cities; and their calamities came upon them on the occasion following."

He then gives the reason for the curse upon Canaan, which we omit, and pass on to Shem.

"Shem, the third son of Noah, had five sons, who inhabited the land that began at the Euphrates, and reached to the Indian Ocean. For Elam left behind him the Elamites, the ancestors of the Persians. Ashur lived at the city Nineveh; and named his subjects *Assyrians*, who became the most fortunate nation beyond others. Arphaxad named the Arphaxadites, who are now called Chaldeans. Aram had the Aramites, which the Greeks call *Syrians:* as Laud founded the Laudites, which are now called

Lydians. Of the four sons of Aram, Uz founded Trachonitis and Damascus; this country lies between Palestine and Celesyria. Ul founded Armenia; and Gather the Bactrians; and Mesa the Mesaneans; it is now called Charax Spasini. Sala was the son of Arphaxad; and his son was Heber, from whom they originally called the Jews Hebrews. Heber begat Joctan and Phaleg; he was called Phaleg because he was born at the dispersion of the nations to their several countries; for Phaleg among the Hebrews signifies *division.* Now Joctan, one of the sons of Heber, had these sons; Elmodad, Saleph, Asermoth, Jera, Adoram, Aizel, Decla, Ebal, Abamiel, Sabeus, Ophir, Euilat, and Jobab. These inhabited from Cophen, an Indian river, and in part of Aria, adjoining to it. And this shall suffice concerning the sons of Shem."

We have furnished this long extract to our readers to place before them, in the shortest possible manner, all that can be fairly said upon the subject; for although many writers have written on this subject since Josephus, and have indulged in many ingenious speculations, yet the above extracts are the foundations upon which they have all been built; consequently if they are defective the superstructures must fall with them.

It is evident, from the whole tenor of these extracts, that Josephus had no authority for locating the patriarchs and their immediate descendants, in the particular countries he has appropriated to them, but the single circumstances of a resemblance of names in orthography, or sound. Philosophical

etymology, although it has recently assumed a form and substance entitling it to high consideration, does not yet promise to perform as much for the history of man, as Josephus claims for it, on grounds which are rejected by the more erudite and cautious moderns. It is true that modern philologists promised to unfold "the history of every people" by their researches; yet this was only the promise of immature and inexperienced youth, when everything is full of gay and bright visions of the future, remembered only to be laughed at when age and experience inform them of their true power.

Although we will scarcely assent to the saying of Sir William Jones (than whom there has never been a more competent judge), that philosophical etymology "is commonly fallacious, and which, where it elucidates one fact, obscures a thousand," when applied to the rigid principles of the science of the present day, yet it is certainly applicable to, and was justified by, the very loose and conjectural state of the science prior to his time. If mere sound, or fancied resemblances of any kind, should be taken as guides, how easy would it have been for an ingenious writer, when Josephus wrote, spurred to it by national pride, when all the cultivated languages, and all the barbarous then known, were immediate derivatives from one common root, and bore a close resemblance to each other, to find analogies to answer any purpose he desired to accomplish? It is a remarkable and important truth, not only in the investigation of the accuracy of Josephus, but in the history of man, that all the then

known languages for great distances around ancient Babylon were primitives, resolvable into roots within themselves, and each having a striking affinity for every other. This remark is applicable to the Goths and Celts who inhabited the north between the Black and Caspian Seas, and, probably, before Sesostris' time occupied the northern part of Syria; the Phœnician, Syrian, Phelvi, Sanscrit, Hebrew, Arabian, Egyptian, Abyssinian and the Greek languages. It so happens that although the ancient Hebrew, that which was in use prior to the Babylonish captivity, was, probably, as nearly allied to the primitive Noachian stem, as any other, yet after that event it ceased to be the language of the Jews, except as a learned tongue. The Jews did not speak the *pure* Hebrew in Josephus's time; but the *Chaldee* mixed with many Hebraisms. How then could Josephus tell us, from the pronunciation of his "own country language," by the names of cities and rivers, the locations of patriarchs more than two thousand years before his time?

Analogy in sound and orthography, at this time, would be scarcely thought worth mentioning, as proof of any important historical fact, unless they were accompanied by some other circumstances to give them strength and importance. Words may be wholly dissimilar in these respects, in different languages, and yet traceable to the same root; and they may be very similar, or identical, even in the same language, and have different roots and significations. The English language abounds with them; as *meet* to assemble; *meat* flesh or food; and *mete*

measure. *Lyre* an instrument of music; *liar* one who speaks falsely. *Rite* a ceremony; *write* to use a pen. In these examples the orthography is but slightly altered, and the pronunciation is identical; but the significations and derivations of the words are very different.

But there are other highly important facts to notice, in regard to all the ancient Shemitic and Hamo-Shemitic languages, which exhibit the very unstable condition of the dialects of the period. The alphabets of all of them were destitute of vowels; consequently their books, or manuscripts, consisted of a series of consonants, leaving the vowels to be supplied by the reader. Besides, these consonants were written *continua serie*, without space between the words, or any vowel points or accents, by which the vowels could be supplied, or the words distinguished. Now although it is acknowledged that, from the time of Moses to the Babylonish captivity, the Hebrew language was remarkably stable, yet after that event it underwent so great a change, that the original Hebrew became a dead language, only known to the learned. To this must be added the frequent practice of using one consonant for another, and of omitting, or abolishing the use of radical letters, which, even in our modern tongues, give to the same words widely different pronunciations and significations, many examples of which are given by Dr. Webster, in some of which the pronunciation is retained, while the sense is altered. Although, therefore, we should be disposed to pay a proper respect to etymological ethnology, yet the

above facts are sufficient to show that *mere resemblance* in orthography, or pronunciation, is entitled to no consideration.

Dr. Webster takes notice of Josephus's propensity to infer significations from resemblances, instead of from the etymological deductions of words. "The first example of etymology which I shall mention," says he, "is that of Josephus, the historian of the Jews, who informs his readers that the first man was called *Adam*, which in the Hebrew tongue signifies one that is *red*, because he was formed out of *red earth* compounded together; for of that kind is virgin and true earth. Here is a mistake proceeding from a mere resemblance of words; it being certain that *Adam* no more signifies *red earth* than it does *red cedar*. This mistake is connected with another, that Adam was the proper name of the *first man, an individual;* whereas the word is the *generic name of the human species*, and like *man* in English, signifies form, shape, image, expressing distinctively the characteristic eminence or distinction of form of the human race." Introduction to "American Dictionary," article "Etymology."

But let us refer to a few historical facts, to discover how much reliance should be placed upon Josephus's Ethnology.

The English language is compounded of the Latin, Norman French, Greek, Celtic, Saxon, and words imported and adopted from various sources. The words from the Latin, with their various compounds, are about three times as many as from the Saxon; those from the French twice as many;

and those from the Greek, exclusive of scientific terms, about the same number. How easy would it be, with far greater reason than appears from Josephus, from these facts, to derive the English from the Romans, the Norman French, or even from the Greeks, rather than from the Saxons? On referring to the History of England, we immediately become acquainted with the causes which contributed to form the curiously compounded language upon a Saxon basis. The whole cause cannot be attributed to conquest, although both the Romans and French got possession of the island, and the latter tongue chiefly became engrafted on the Saxon from this cause. On the contrary the Latin words have been derived chiefly, and the Greek altogether, from their literature; and the Latin particularly owes its greater prevalence to the fact that it was, for a long time, the language of religion, law, and literature. Religion is a powerful cause to distribute language over a very extensive country, as may be seen by the very general prevalence of the Arabian and Sanscrit languages in Africa and Asia. We know that a similar influence prevailed long anterior to Josephus; for a similar mythology prevailed, almost universally, from Babylon in every direction. The same Jupiter was worshipped in Babylon, Thebes, and every city of Asia Minor and Greece.

The ingenious and learned author of the article in Dr. Lardner's Cabinet Cyclopedia, entitled "History of Maritime and Inland Discovery," after having followed Josephus faithfully as far as he

goes, very ingeniously extends his text, to establish *identity of races* of men from "the resemblance of their languages." Not, however, contented with this, in which he was justified by Josephus, he does not scruple to establish a relationship from the fact that "the same spirit of *industry* animated both nations." Though "the Canaanites," says he, "and the Phœnicians, were separated by Mount Carmel, yet, as the *same spirit of industry animated both*, they may, in a general sense, be regarded as one people."

It is thus that highly important inferences are drawn from resemblances. Instead of using arguments to prove the weakness of this method of proving facts, let us refer to a few known historic facts, which will more clearly show what reliance should be placed on such analogies, and which will be of more weight than any arguments, however ingenious. The Romans possessed as colonies, in the height of their power, a great part of the then known world. For this reason their names of places yet figure in the geography of far distant nations, embracing different families of mankind. Their language, also, has been incorporated, more or less, with the languages of all the nations which were subjected to them. This "resemblance of language," and identity of geographic names, is far more extensive than those furnished by Josephus, or any of his followers in the same mode of argument, and stronger inferences might be drawn to show that the people were derived from Rome, if history were not in the way. If history were as

silent in respect to Rome, as it is in regard to the ancient history of Western Asia, Africa, and Greece, some Josephus could readily solve the mystery of the settlement of these countries by the Roman people.

Spain affords another example of the uncertainty of historical facts being inferred from etymology, even proceeding upon the strict principles of the modern science. The Arabs held Spain many centuries before they were finally expelled; but they have stamped upon that peninsula many geographic names, upon their nobility titles of distinction, and upon their language words, which would furnish to etymologists, like Josephus, abundant evidences that the Spaniards are derived from the Arabs. Fortunately for the honor of the Spaniards, history informs us that so far from having descended from them, they regard any mixture of Arabian blood an indelible disgrace, as they do a pure Christian descent a species of illustrious truth, or title of nobility.

Persia affords another, and a stronger example, of a mode by which a nation may be stamped with the peculiar characters of another, which would require all the tact and skill of the best ethnologists of our own day to unravel, if they had happened before there were historians to record the events. Upon the conquest of the Persians by the Arabs, everything became Arabian in the country which it was possible for human exertions to change. The genius and texture of language it was impossible for them to alter; but they have incorporated with the Persic so many Arabic words, that it requires

much skill to discern between them. And, although the Empire of the Caliphs has passed away, and Persia is again a nation; she is again a nation of Arabs in everything but the princes who hold the reins of government, and the peculiar variety of temperament observable in the same species.

Hindostan is another remarkable example of the same thing, with this difference; that the Persians and Arabs being of the same species, have coalesced and made a homogeneous people; but the Tartars and Hindus, being different species, have kept distinct. But we have probably given more than enough examples to this point, and shall therefore return to Josephus.

That not only Josephus, but the Jewish people, might easily and innocently be mistaken in regard to the real persons who were the progenitors of any other nations than their own, and the nations immediately in contact with them, is highly probable from several important considerations. Before we enter upon them we will notice an important error, in assigning to Ashur, *the son of Shem*, the settlement of the kingdom of Assyria, instead of Ashur, *the son of Ham*. Dr. Scott notices this error. Speaking of Nimrod, he says, "When he had erected a kingdom at Babel, he went forth out of that land to Ashur, and builded Nineveh. Thus may the words be rendered, and this appears to be the true meaning of them; *for the descendants of Ham* are spoken of, and not those of Shem, who had a son called Ashur." It is easily seen how a mistake of this kind might be made, when the occurrences trans-

pired about nine hundred years before the Israelites became a settled nation, in an age when intercourse between comparative neighbors was difficult, at long intervals, and before records were kept. But it is not so easy to discover how Josephus fell into this error, when he had the passage in Genesis before him, which ascribes the settlement of Assyria to the children of Ham. If, after the confusion of tongues, the original antecedent names were preserved, they were probably preserved by the children of Shem (which we will notice more at large presently), and many individuals of Shem's and Ham's families might receive the same name, and so produce difficulty in tracing the real progenitors of any nation. Josephus also appears to have lost sight of the people with whom Abraham dwelt at Haran, when he was called to separate himself from the Hamo-Shemites. These will be the subject of remark hereafter.

Our attention is again drawn to several evident errors in the location of the children of Shem. "Now Joctan, one of the sons of Heber," says Josephus, "had these sons; Elmodad, Saleph, Asermoth, Jera, Adoram, Aizel, Decla, Ebal, Abimael, Sabeus, Ophir, Euilat, and Jobab. These inhabited from Cophen, an Indian river, and in part of Asia adjoining to it."

We have no means of knowing anything about these sons of Joctan, except Sabeus and Ophir, who, says Josephus, settled on "Cophen, an Indian river." There are four persons in Scripture of the name of Sheba, or Sabeas,—one a son of Cush and

grandson of Ham,—another a son of Raamah, a grandson of Cush,—another a son of Joktan, the son of Heber, of the family of Shem—and a fourth, a son of Jockshan, a son of Abraham, by Returah. All of these settled in Arabia, and constituted the nation of Sabeans, or Shebeans; of whom those in Arabia Felix were noted merchants, and mentioned by Ezekiel. It is therefore highly probable that Josephus is in an error in placing him on "Cophen, an Indian river," as all agree that he settled in Arabia.

In respect to Ophir, who is also placed by Josephus on this Indian river "there has been much learned controversy, which, probably, would never have arisen if Josephus had not placed him in India. We do not design to enter into this controversy, in which so many ingenious theories have been contrived; but we may say, from the highest authority, that Ophir was in Tarshish; and that a voyage to Tarshish could be made either by the Red Sea, or the Mediterranean; consequently, as the voyage to Ophir was always made down the Red Sea, Tarshish must have been a country, stretching from the shore of the Mediterranean, west of Egypt, to the south-eastern shore of Africa, south of, or about the Equator. The fact that voyages were made to Ophir for gold is almost, in itself, conclusive evidence against locating it in India; for India has never been from the earliest history of the country, productive of gold for exportation.

The truth is that the Jewish people were behind their age in geographical knowledge. Absorbed, as

it were, in the higher and more important duties of theology—the chosen people of God, who constantly manifested his superintending control and government of their civil and religious affairs;—exclusive in their habits, from the whole tenor of their institutions—they neither had the same interest, nor inclination, as other nations, to acquire extensive and accurate geographical knowledge. For this reason Tarshish and Ophir, with which places they had frequent and constant intercourse, even as late as the day of Josephus, are left in so much uncertainty, that their locations can now be only probably ascertained, by a variety of accidental circumstances, always related in connexion with them. And yet Tarshish was a country with which their intercourse was so frequent, that they had at least one packet trading to it, which carried passengers for a regular fare; for Jonah when flying from the Lord, went to Joppa where "he found a ship going to Tarshish; so he paid the fare thereof, and went down into it, to go with them unto Tarshish from the presence of the Lord."

Although "the Isles of the Gentiles" appear to be universally agreed to refer to the islands of the Mediterranean, and adjacent seas, "most known to the ancient inhabitants of Asia," especially the Israelites, we are very confident that this universal assent has been given without a proper consideration of the subject. It was very natural, for the Jews, when they occupied Canaan, with their extremely limited geographical knowledge, to suppose that the "Isles" of the Mediterranean, were by far the most impor-

tant, and, probably, all the islands in the world. They could only speak of what they knew, and they knew of none others: consequently as "the Isles" were appropriated to the descendants of Japheth, they had no other islands to place them in, but those of the Mediterranean and adjacent seas. This was, in all probability, the chief reason which induced the Jews, and their great historian Josephus, for believing that Europe was settled by the children of Japheth; because as they were to possess "the Isles of the Gentiles," and with a liberal construction the peninsulas also; and as they knew of no other Islands and Peninsulas but those of the Mediterranean, and Asia Minor, and the southern limits of Europe, it must have been very clear to them, that the sons of Japheth occupied these lands, which had been appropriated to them by the same almighty power who had given to them Canaan. They could only reason about what they knew; and satisfied with what they knew, it was no difficult matter, in that early age, to give names to the country suited to their knowledge, or find a resemblance in such as were given, to satisfy them that the names were derived from some descendant of Japheth.

To find the true meaning of "the Isles of the Gentiles" which were appropriated to the children of Japheth, we must refer to the condition of the world, at the time when the decree of the Almighty was executed, and they were "scattered abroad from *thence* upon the face of *all* the earth." Now we know that the Jews were not a people when this decree was executed; and all they subsequently

knew of it was revealed to Moses some nine hundred years after it had taken place. We know, too, that they never, while a nation, had a sufficient knowledge, either by revelation, or their own researches, of the geography of "*all the earth*" to speak judiciously on the subject; and we also know that the all-wise God who revealed to Moses the execution of this decree, was well acquainted with the geography of the earth he had made, and certainly was not limitted in his view of "all the earth" to the Mediterranean and adjacent shores. We know, although the Jews did not, that there was a world of Islands and Peninsulas south-east, and east of their then location in the valley of Shinar, of infinitely more importance, territorially and productively, than the Islands and Peninsulas of the Mediterranean. Knowing these things, we may well pause before we may give implicit credit to the traditions of the Jews, in relation to a matter which we are better enabled to decide than they were, because we have the facts more fully before us.

And what are the facts which should be considered in relation to this matter? First in regard to the place or country occupied by all the descendants of Noah, from whence they were to be dispersed "over all the earth." This was Shinar; a country embracing the Tigris and Euphrates in Asia, bounded on the south by the Persian gulf, and extending north to Assyria and Mesopotamia—a country, in every respect, admirably situated, as a centre of distribution of mankind to "all the earth." From this country the Southern Ocean, abounding in "Isles;"

—southern, eastern, and northern Asia were not only of easy access, and inviting by the fertility of the soil; but presented no particular obstacles to the progress of persons seeking their allotted homes; while to the west, between Shinar and the Mediterranean and Red Seas, the desert of Arabia was not only uninviting, but presented difficulties which could only be surmounted, at a subsequent period, by the providential and miraculous interposition of Divine power. The inhabitants of Shinar, at the period we have under consideration, it is fair to presume, knew less of the Red Sea and of the Mediterranean, than of the Persian gulf. Drs. Scott, Henry, and other annotators on this passage, are in error when they say that the "Isles of the Gentiles" "generally mean the parts of Europe most known to the ancient inhabitants of Asia," if, by "ancient inhabitants," they mean, as they clearly do, the Jews after they settled in Canaan, nine hundred years after the time of which we are speaking. The presumption is so strong as almost to amount to a certainty, that the inhabitants of Shinar, at this period, were absolutely in ignorance respecting the parts of the earth they were to inhabit; and that, in choosing their directions for emigrating, after the miraculous confusion of tongues, they were controled by Divine impulses, in conformity with what God knew to be right in reference to peopling "all the earth." If they had been left to their own impulses in their migrations, we have a right to infer, from the uninviting features of the country west of Shinar, that the Red Sea and Mediterranean would not have been

discovered and settled, until the pressure of population in Eastern Asia had forced some wandering tribe across the inhospitable Desert of Arabia; for, of themselves, they could not know that Egypt was a land overflowed by the Nile;—that Canaan was a land flowing with milk and honey;—that Asia Minor, Greece, Italy, "and the Isles" bordered on the Mediterranean,—any more than that the same geographic features were still more boldly and strongly marked upon the whole of Southern Asia, and the great ocean which bounded it. In the very important matter of peopling the earth, by the comparatively few inhabitants of Shinar, nothing could be left to chance, or the natural impulses of human desire; but they must have been distributed by the influence of divine power, as it is very significantly expressed in the Revelation to Moses, "after their generations, in their nations." And thus it is that we find a majority of Yellow people in Eastern Asia, with their peculiar physical characteristics; a majority of Red, or copper-colored people in Central Asia, and America; a majority of Blacks in Africa; and a majority of White races in Western Asia and all of Europe; each distinguished by such peculiar physical characteristics, that they would naturally be kept distinct nations, according to the promises and curses which had been previously foretold of them, and which was afterwards pronounced upon Ishmael. Can any one imagine that this beautiful arrangement of the human family, by which each peculiar physical generation and nation, is geographically separated from every other, happened by the

blind chance of human impulse without knowing that there was suitable land in the direction they blindly took? Can any one suppose that this chance placed all the Yellow men in one spot,—all the Red men in another,—all the Black men in another,—and all the White men in another? Or is it not more consistent with common sense, that Infinite Wisdom directed this beautiful arrangement, "after their families, after their tongues, in their lands, after their nations?"

We have a right therefore to conclude, because the fact is so, and, from the earliest history, has always been so, that the different races of men, according to their physical characteristics, were dispersed, or distributed, substantially, to the different quarters they now occupy, and always have inhabited. And we have also a right to infer from the earliest history and the facts of the case, that these "generations, in their nations" did not mingle in their migrations; but as we shall presently see, separated from each other. This brings us to the question—How do we know that the Shemitic nations peopled Europe; the Japhethic Eastern Asia; the Canaanitic Africa; and the Ishmaelitic Central Asia?

The answer does not appear to be difficult, if we are disposed to be satisfied with a high degree of probability, in a matter not susceptible of positive proof; and if we divest our minds of the authority of Josephus and his followers. We positively know that at least some of the descendants of Shem were and are white, because the Jews are white, and their genealogy cannot be disputed. We positively know

also, that all of the descendants of Shem and Ham were *not dispersed* to all parts of the earth, at the time when the descendants of Japheth and Canaan were dispersed, immediately after the confusion of tongues at Babel; because Abraham was, long subsequently to this period, born in this region, and emigrated from it by the express command of the Almighty; and the children of Ham, except Canaan and his children, continued to occupy it, and founded the kingdom of Assyria, and built Nineveh. It is a fair inference, therefore, that the descendants of Ham (except Canaan), who were neither blessed nor cursed (except the general blessing bestowed by the Almighty on all Noah's family, "be fruitful and multiply, and replenish the earth,") so as to constitute them a distinct race of men, and the descendants of Shem were not a distinct people physically, but identical. The children of Canaan, however, had been dispersed; for when Abraham, several hundred years after this event, in obedience to the command of God, left his country, kindred, and house, and went to Canaan, "the Canaanite was in the land." Thus we have several circumstances which clearly indicate the migratory movements of these early people; which, connected with subsequent history, and the facts now known, lead us to highly probable conclusions in regard to the settlement of Europe. Abraham and family went to Canaan; his Shemitic and Hamitic brethren who remained in Shinar, in the neighborhood of Babylon, evidently proceeded north, for they settled Assyria and Mesopotamia. From Mesopotamia we also find them proceeding west, where Aram, or the

descendants of Aram, the son of Shem, reached the Mediterranean Sea, north of Canaan, and founded the kingdom of Aram, afterwards Syria. From Mesopotamia the migration was easy and natural, by the valley of the Euphrates, around Mount Ararat, to Armenia, lying between the Caspian and Euxine Seas, and the Caucasian and Ararat Mountains.

Thus we find the descendants of Shem reached the Mediterranean by at least two routes—the one taken by Abraham through the desert of Arabia, where he cast forth Ishmael, who became the founder of a race of men;—and the other by Aram through Assyria and Mesopotamia. The Canaanites had preceded them, and were subsequently destroyed, or driven into Africa by the Jews.

The Jews made no settlements in Asia Minor, nor in Europe; but discarding the analogy of names, from which Josephus concludes that the children of Japheth made these settlements, is it not more rational to conclude that the Shemites and Hamites (not of Canaan), who now stretched across the Isthmus from the Mediterranean to the Euxine, were mistaken by Josephus for Japhethites? But we are now prepared to show that the analogy of names, which constitutes the only authority upon which Josephus locates the children of Japheth in Asia Minor, Greece, and other parts of Europe, warrants no such inference.

To give a reasonable color to the method adopted by Josephus that he was correct, he should have shown that the descendants of Shem, Ham, and

Japheth, never named children alike. If they did in any instances name them alike, of course, at the remote period when he wrote it would be impossible for Josephus to tell from what progenitor they were derived. We know that such instances were numerous, especially between the Hamites (we always use this name excluding the Canaanites) and Shemites, excepting the line of Abraham, Isaac, and Jacob; an instance of which we have already seen, in which Josephus ascribes the settlement of Assyria to Ashur, a son of Shem, instead of Ashur, a son of Ham. Another instance occurs in the name of Sheba, of whom there are four, two of whom were descendants of Ham and two of Shem; to which others might be added if these were not thought sufficient. This circumstance is entitled to consideration; but we have another, confirming this view, which scarcely leaves a doubt on the mind that Josephus made a mistake in his conclusions; and that, if the names are indicative of anything on the subject, they point to the children of Shem and Ham, and not of Japheth.

It is clear that Josephus drew his inferences from old Hebrew names of places, or rather names resembling Hebrew names, because he says so himself. "Such names are pronounced here," says he, "after the manner of the Greeks, to please my readers; for our country language does not so pronounce them." By the confusion of tongues at Babel, it is very certain that the children of Japheth and Canaan had different languages, or dialects, assigned to them, from the descendants of Shem and of Ham, who re-

mained in the valley of Shinar, some time after the dispersion; therefore as the Hebrews, who descended from those who remained, had the Hebrew language, it is certain that the Japhethites had it not. Consequently, as Josephus drew all his inferences from an analogy of Hebrew names, if he is correct in the radical analogy of the words, they point to the children of Shem or Ham, and not Japheth.

Prior to the confusion of tongues "the whole earth was of one language and one speech." What this one language was, and to what extent the confusion prevailed, we have no means of positively ascertaining. It is highly probable it was the ancient Chaldee; for we can see no reason why the Shemites, and Hamo-Shemites, who remained in Chaldea as one people, long after the dispersion, should not understand one another. To accomplish the dispersion, the confusion of tongues of the masses, composing families and nations, who were destined for different directions, would be as effectual as if the original tongue had been abolished, and new ones substituted. It is probable, however, that some of the Hamo-Shemites were confounded in speech at the same time with the Japhethites and Canaanites; for it is certain that the Egyptians (who were of this stock) must have settled Egypt immediately after the dispersion at Babel, and long before the arrival of Abraham in that country. It is not necessary to suppose any miraculous change of language, to account for the diversities of dialects prevailing among men *of the same species;* but whatever causes produced the original changes we may

confidently affirm them to have been only dialectically modified, from the ascertained fact that, *in the same species*, the filiations of the dialects of each to a common stem is apparent. All the Shemitic and Hamo-Shemitic tongues bear undoubted evidences of having originated from a common stem. The roots of many of the words are the same in all of them, conveying the same ideas; and the chief differences arise from different inflections, and the mode of forming compounds and derivatives. Not so, however, with the languages of the three original species of men, the Shemitic, the Japhethic, and the Canaanitic; for while there are a few features, and a few words common to them all, yet the striking disparities between them show that the connexion is remote, and that the disruption was produced by other than the usual natural causes.

That the primitive language was not very different from the ancient Chaldee, or Abrahamic, is more than a probability; for Heber, the father of Peleg, from whom Abraham descended in a direct line, lived over one hundred years after Abraham's departure from Ur; therefore, as the confusion of tongues and dispersion took place at the birth of Peleg, three hundred and twenty-one years before these events, it is apparent that Heber and Abraham spoke a common language, the ancient Chaldee, as did all the inhabitants who remained in Chaldee after the dispersion; for it appears, that, in the distribution of mankind, regard was paid to their "tongues" as well as families and nations.

It is more than probable, therefore, that the an-

cient Hebrew and Chaldee were identical, and that they did not begin to diverge until after Abraham's arrival in Canaan and Egypt, when new scenes, new wants, other climates, and other associations, begat modifications of his original tongue. Nor are we to imagine that the Chaldee language remained stationary; for in the early ages of every country, when the people are rude and unsettled, language is constantly undergoing modifications. Even our English, since the art of printing has given to it a permanence which no ancient language possessed, has undergone so great a change, that authors of two centuries standing are read with difficulty by persons unaccustomed to them. Thus, therefore, the ancient Chaldee and Hebrew, although at first identical, diverged from the original tongue by a double process; though, it is probable, the Hebrew departed most rapidly from the original stem, after the return from Babylonish captivity.

The descendants of Shem, at least in the line of Heber, were not dispersed at the general distribution at Babel. Nor were all the descendants of Ham (except those of Canaan), as they were not to be the founders of distinct races of men. We find the descendants of these two patriarchs in Chaldea long after the dispersion at Babel took place. Nimrod and his descendants founded the kingdoms of Chaldea and Assyria; and Terah and his relatives went from Ur to Haran, from whence Abraham was called to inhabit Canaan. That these Hamo-Shemites had a different language from the Japhethites and Canaanites we are assured; but whether this

was a radical, or only a dialectic difference, will not be satisfactorily ascertained until we have as thorough a knowledge, at least, of the Japhethic and Canaanitic, as we have of the Shemitic and Hamo-Shemitic tongues. For example;—The Greek language, although resolvable into roots within itself, has so strong a filiation with the Hebrew, as to warrant the belief that it is derived from the same stem; which intimates the people to have been derived from those Hamo-Shemites from whom Abraham separated in Chaldea, and not the Japhethites. They were certainly not derived from the Israelites. The same thing may be said of the parent languages of all Europe, and may be extended to every Shemitic and Hamo-Shemitic tongue.

But whether the confusion of tongues amounted to a radical, or only a dialectic change, it is very certain that the change was such that the different parties could not understand one another's speech. How then did it happen that the descendants of Japheth gave Hebrew names to Asia Minor, Greece, and other parts of Europe, by which Josephus could discover the progenitor through whom they were derived? We have seen that the Shemites and Hamo-Shemites had the Hebrew and Chaldee; therefore the Japhethites must have had some other tongue; and yet the Hebrew names, given by Josephus, were not a dialect of that language, not understood in Judea, but the very language itself which was then used; for, says Josephus, "our own country language does not so pronounce them,"—meaning as the Greeks pronounced them.

From the time of Abraham's departure from his brethren in Chaldea, until the restoration of the Israelites to Canaan, under Moses, was about six hundred years; consequently the Israelites grew to be a nation, amidst scenery, productions, and circumstances, entirely different from those who remained in Shinar, and emigrated north to Assyria, Mesopotamia, and Aram or Syria, &c. Besides, the Jews were over two hundred, if not over four hundred years captives in Egypt. Notwithstanding, therefore, that Abraham and his family, when they left Haran, spoke the language common in Chaldea, Assyria, and Mesopotamia, which had probably all dialectic differences, incident to different locations and pursuits, yet the long separation, and the various circumstances operating to influence them, necessarily produced a dialectic difference between the languages of the Israelites, and their Shemitic and Hamitic brethren of Chaldea, Assyria, Mesopotamia, and Aram, &c. And the languages would continue to diverge more and more, with new scenes, new wants, new employments, &c., which would be presented to them with every change; until at last the separation became perfected in the musical and highly polished Greek.

Against the geographical knowledge of the Jews we may not improperly place that of the Arabs; who, notwithstanding their general migratory or roving habits, were among the most learned people of this ancient period. Their migratory habits, and predatory excursions, gave them a more extensive knowledge of Asia than the Jews at any time pos-

sessed. Josephus placed Gog in the country north of Judea; Ezekiel, with more accuracy, places the country of Magog, the land of Gog, "in the north parts,"—an expression allowing any position north of east. The Arabs place the country of Magog in the region east of the Aral Sea, at the foot of the Altai mountains; probably part of the country now known as Mongolia. Gog they call Yajooj, and Magog, Majooj. They speak of China under the name of Seen; and of India within and beyond the Ganges. They mention Sumatra by the name of Lamery, which was productive of camphor, gold, ivory, dye-woods, &c.; and refer also to El-Djavah, which is probably the Island of Java.

Thus we see that the country of Magog which Ezekiel indeterminately placed in "the north parts," Josephus determinately locates on the Euxine Sea, and the Arabian geographers in Eastern Middle Asia, at the foot of the Altai mountains. Wherever they lived, it is certain they were a great terror to the Jews; and it is certain that their hosts, and mode of predatory warfare, were precisely descriptive of the dreadful irruptions of the Tartars and Mongols of subsequent periods. They came on horses "to take a spoil, and take a prey;" and "to make desolate places now inhabited," of the nations "which have gotten cattle and goods." Their numbers were overwhelming, and could only correspond to the hosts of central eastern, and not northern Asia.

It was our intention to have illustrated our views by a full examination of the early Grecian history; but we have already consumed so much time with

other matter that we will content ourselves, and we fear more than content our readers, by as short a survey of it as possible.

All the Grecian historians agree that the earliest known inhabitants of Greece were Pelasgians, a people derived from Asia Minor. It appears that Sicyon and Argos were the first cities founded in Greece. We are not about to investigate the relative merits of different chronologers in regard to the dates of the early Grecian history, for which task we confess incompetence; but will follow Blair, because we think his dates are more agreeable to the tenor of the earliest and most authentic of all histories. He has fixed the date of the foundations of Sicyon 2089 years before the Christian era, and of Argos two hundred and thirty-three years later. Sicyon, therefore, was founded only two hundred and fifty-nine years after the flood; a period which may harmonize very well with the migrations of the Shemo-Hamitic inhabitants, whom we have traced from Shinar to Mesopotamia, Armenia, and Aramea, or Syria. That these Pelasgians were not originally barbarous savages, but possessed the polish and education belonging to the Shemitic race of the period, and from whom the Egyptians derived their early scientific fame, is evident from what Homer, Herodotus, and Strabo, say of Olen, the Lycian, who composed the hymns sung to Apollo, at Delos, and contended with the Muses for superiority. It appears that he invented the Grecian hexameter verse. It is said by chronologers that cities are not built in a day; and that

therefore the country must have been first overrun by roving hordes; and that cities gradually grew in the progress of civilization. We think otherwise; for it is an undoubted fact that in the patriarchal age, the first work, in making a settlement in any place, was to found a city. It is so even at the present day among the savages of our own woods, or the roving and predatory Tartars of Asia. They all have collections of wigwams, or tents, or more permanent towns, or cities, in which the tribe, or tribes, live associated together. What we now understand by cities, with their charters, their splendor, and luxuries, are produced by the refinements of civilization, and are of slow growth; but we must not confound our ideas of a city, with those of the period about which we are treating. It is, therefore, highly probable that Sicyon and Argos were the first settlements in Greece. If we were disposed to infer, from a resemblance of names, as Josephus has done, that the Pelasgians were a branch of the Shemo-Hamitic race, we could refer to the name of Peleg—Pelegians—and by a slight corruption, Pelasgians. Nor would it be necessary to infer that they were actually derived from Peleg, the son of Eber; for it is well known that, in the times of which we are now speaking, the names of individuals, or races, were bestowed with a meaning referring to some quality, event, or circumstance, connected with the individual. Peleg was so named because of the dispersion at Babel; and the Pelasgians might have been so named because they separated them-

selves from their brethren. But we prefer to rest the proof that the Pelasgians were thus derived upon the known fact, that these Shemo-Hamitic people then occupied the most favorable position in Syria, Mesopotamia, and Armenia, for peopling Asia Minor, and from thence Greece, which according to Herodotus, was anciently called Pelasgia.

The next colony which settled in Greece were Egyptians. Pharoneus was probably the first, but was too feeble to make a distinctive settlement, to stamp a character upon the people. It was followed by Danaus, who became King of Argia, and became so celebrated that he gave his name to the Peninsula, which, from Pelasgia, now became Danai. Egypt was settled by Mizraim, a son of Ham, and was, therefore, a branch of the same Shemo-Hamitic race as the Pelasgians, Syrians, &c., and the Phenicians, a province of Syria. These people should never be confounded with the Canaanites, who occupied the country lying between Syria and Egypt, on the Mediterranean; but who never made a settlement in Europe. The Egyptians and Phenicians made frequent settlements in Europe, and soon made a homogeneous mass with the original inhabitants, because they were derived from the same stock, and did not constitute different races; but the Canaanites were a different race, by the curse of the Almighty; and, notwithstanding their early civilization and commercial enterprise, never made a settlement in Europe.

The appellation of Pelasgia for Greece, subsequently came to be superseded by Ionia and Æolia, from descendants of Deucalion, who divided the country between them. Ion's principal seat was in Attica. Because this country became thus to be called Ionia, Josephus says, that it must have been settled by the descendants of Javan, the son of Japheth. But Ion was the son of Xuthus, who was the son of Hellen, who was the son of Deucalion, who was a Pelasgian prince—we say he was a Pelasgian, because the Ionians were originally called Ægialian Pelasgians, when they emigrated to form new settlements, to distinguish them from other Pelasgians, who did not emigrate from Ionia.

We have given this very short history of the early settlement of Greece, to show that Josephus was not right in supposing Greece to have been settled by the descendants of Japheth, because the country was called Ionia. If the name had come from this patriarch, it would certainly have been the first name of the country; whereas we find that the name of Pelasgia long prevailed, and that of Ionia only became applied upon the accession to the throne of Ion, the son of Xuthus, a Pelasgian.

Our views in regard to this matter must be much strengthened by the fact that the decree of the Almighty, in regard to the different races of men,—that Japheth should be enlarged,—Canaan a servant of servants,—Shem a blessing to all mankind,—could not be as efficiently and easily executed, if all the races were permitted to emigrate in one direction, even if they were physically changed. Some of the

descendants of Canaan, it is true, were settled on the Mediterranean; but their destination was not for this place, but for Africa; and they were driven from the country to their permanent abodes.

It appears, therefore, that Europe was the original destination of the Shemo-Hamitic, or white race; and that the blessing pronounced upon Shem, in whom the descendants of Ham have merged, "except Canaan," has peculiarly accompanied this race from the earliest history. When the direct descendants of Shem became obstinate and rebellious, the mantle of favor and power passed to the Gentiles, a collateral branch; and the whole white race has gone forward to a degree of perfection far surpassing the others. The Japhethic or yellow race has been enlarged abundantly, for their members are probably over one half of mankind; but they have remained stationary in moral and intellectual improvement for at least 2000 years, and how much longer we know not. The Ishmaelites continue to this day very little, if any, in advance of the condition of the patriarchal age. And the Canaanites have retrograded far behind the knowledge and civilization they carried with them from the dispersion of Babel.

It is a very remarkable fact, and belongs to the natural history of man, of which we are treating, that the countries east and north, and around the Euphrates, where the moral and intellectual attributes of man first commenced, should all either remain stationary, in comparison with the first state, or advance a little, and then become stationary, while the western migrations from the same point have increased

in splendor and power, becoming more and more enlarged and intense, as they advance further from the point of departure. The literal fulfilment of the blessing of Shem and his descendants, is also another very remarkable circumstance in the history of man. When the line of Shem to Abraham and the Jews, who were the special favorites of the Almighty until the birth of our Savior, became unfit channels for the communication of the blessing to all mankind, the channel for that communication was opened through the collateral issue of Shem, through whom it is pouring out abundantly all the highest moral and intellectual benefits to the whole race. And yet more remarkable that, at the moment of time when their collateral issue were to be made the recipients and dispensers of this blessing, the heathen mythology of the most enlightened and highly polished nations of antiquity,—the beautiful and complex creature of a highly ingenious and imaginative people, was destined to pass away, to give place to the simple, unimpassioned, but incomparably more sublime religion of the Creator of Heaven and Earth.

It will be evident that we might have avoided all disputes about the settlement of the descendants of Noah, if, instead of taking the names of Shem, &c., for the names of races of men, we had selected the names of White, Yellow, Red, and Black; which could be open to no very serious objection. By so doing, however, we would necessarily have been confined to the history of man as we find him, without reference to his origin; in which case we might

have been met by the objection that as all mankind sprang from one parent, they must be of one species. We preferred to meet this objection as a main feature of our system, rather than collaterally, and have therefore incorporated it in the names of the persons, in whom the specific differences were made.

It will also be observed that in the list of characteristics we have given to each species, we have necessarily added those of a spiritual nature, in accordance with our opinion of the twofold nature of man. This calls for no remark, the subject having been already discussed.

At the head of the physical distinctions of the several species, we have placed the sensibility of each species, as a characteristic of primary importance; because, however important the mass of brains of any individual may be, the peculiar functional powers of this organ, with all its branches, constituting the nervous system, are equally important. It is unnecessary now to enlarge upon the importance of this characteristic, in the consideration of specific distinctions, as we will have occasion to illustrate it repeatedly hereafter.

In conclusion we remark, that we have adopted the nomenclature of the Bible for our species, because we desired to meet the question broadly, and are satisfied our views are in harmony with the sacred volume. But this is entirely a gratuitous matter on our part. The zoologist has nothing to do with descent, beyond a limited extent. Granting all that the advocates for the unity of the species claim,—that all men descended from Adam, through Noah

(which we fully believe, and will prove in our progress), yet all men cannot be of one species without disregarding all the principles relating to zoological character established in the science. There is, in fact, no necessary connexion between the zoological character and the theological origin of man. The zoological characters can be clearly traced, of the different races, for at least 3500, if not 3900 years. From that time to this, these specific characters have remained unaltered. Surely this is ample time to establish specific character. Zoology has nothing to do with the origin of races, the time of their creation; but it is confined to the forms, characters, habits, powers, instincts,—in short, all the phenomena of life in animals. Zoological classification, therefore, is the arrangement of animals under distinct heads, or families, according to their different natures, without regard to their origin. Suppose it could be proved, that 4300 years ago a duck and a mole cohabited, and produced offspring of a middle character between them; but that no such animal has since been produced, but by the natural generation of such progeny; would the Ornithorhynchus be less a distinct animal from both the duck and the mole, zoologically, than he is now? Such a fact would open a new and important field for philosophic investigation; but, we apprehend, it would not materially affect zoology, because the character thus communicated has become permanent, and has been kept distinct. The same might be said of the family of Bats, and of all animals intermediate between classes, or which are only specifically separated. The

only question for consideration by the zoologist, in respect to descent, in his classification, is, Are the distinguishing characteristics of the animal permanent in the race, or variable? If variable, to what extent? Having ascertained these, he classes his animal accordingly.

It is, therefore, apparent that we were not compelled, in reference to the zoological history of man, to refer to the Scriptures at all;—that the zoological and theological questions are really distinct, and perhaps should be kept apart. But they have been so constantly mingled together, by some eminent authors, to disprove the authenticity of Revelation, and by others to support it, that the pure zoological question has been lost between them, in the heat of the controversy. We have purposely kept them together, not because our system required it, but because we fancied that all the known historical and scientific facts clearly support Revelation, and several other sciences could be benefited by a comprehensive view of the two subjects in connexion. Those, however, who are dissatisfied with our scriptural nomenclature, and give a preference to any other, may adopt their own, and discard our reasoning in support of ours, without materially impairing our zoological history of man.

CHAPTER IV.

THE DISTRIBUTION OF VEGETABLES AND ANIMALS OVER THE EARTH IS NOT ANALOGOUS TO THE DISTRIBUTION OF THE HUMAN SPECIES, AND THEREFORE SUCH DISTRIBUTION WILL NOT ASSIST OUR INVESTIGATIONS IN RELATION TO MAN.

As vegetables necessarily constitute all the food, raiment, and most of the comforts of man, mediately or immediately, they may appear to bear a most important influence upon his distribution ; and as this influence is found to prevail universally in relation to animals, some philosophers, reasoning from analogy, have supposed man to have been subject to the same laws of distribution. In short, that a single centre of distribution of the human species, as recorded by Moses, from the garden of Eden, is disproved by analogy of vegetable and animal distribution. We entertain a contrary opinion, and think it can be philosophically proved, that there is, in this respect, no analogy between the lower organic kingdoms, and man ; and that a single centre of distribution for him is philosophical.

The geographic distribution of vegetables and animals over the earth, is one of the most pleasing and highly interesting subjects of inquiry. It will abundantly repay the philosopher for his trouble, inde-

pendently of any expectation that, by its assistance, he will be enabled to unravel the mysterious history of man. The investigator, whose heart is in its right place, finds, at every step in his progress, the infinite wisdom, benevolence, and bounty of Him by whom the whole furniture of the world is arranged with so much precision and beauty. He finds apartments provided for each organism consistent with its most perfect development, its highest enjoyment, and abundant provision for its wants.

The habitats of vegetables and animals are influenced by such a variety of causes, embracing the geological formations and climatic influences of the earth, that the field of investigation is unbounded in extent, variety, and interest. Every spot of the globe appears to be more congenial to some peculiar organisms than others; for while we discover strong contrasts between the vegetables and animals of the different great quarters of the globe—nay in the same quarters when separated by mountains, deserts, or lakes—a close inquirer discovers different plants and animals, near neighbors to each other, and yet as strictly confined to their habitats as if oceans rolled between them.

Although vegetables are much lower in the scale of organic mechanism than animals, yet the power of chemical assimilation is possessed by the former in a far higher degree than the latter. No animal has the power of converting inorganic substances into nourishment, to supply the daily waste of the body, or add to its growth; but vegetables have this power; and by the continual exercise of it, are con-

stantly laying up stores of them, in proper chemical combinations, to nourish the animal kingdom. The distribution, therefore, of vegetables must have preceded that of animals, agreeably to which order we will pursue our hasty survey.

There are three theories which have been adopted and advocated, to account for the distribution of vegetation over the earth. First, that there was one centre of vegetation, from whence it was gradually distributed over the globe. Secondly, that plants had several different centres of vegetation, from which the species were propagated and dispersed. Thirdly, that wherever a suitable soil and climate were found, vegetables peculiarly suited to them sprang up, from whence they were distributed.

The first theory was adopted by the great naturalist, Linnæus. He supposed that the creation of vegetables took place in a warm climate, in which was a high mountain range, embracing all climates of the earth, from the torrid to the frigid zones. He attributes their general distribution to the agency of winds, rivers, marine currents, birds, animals, and man. Such agencies are, no doubt, competent to the task; but in order to establish this theory it is not only necessary to account for the possibility of a distribution by such agencies, but it is also necessary to show that some Alpine spot, in the torrid zone, actually possesses, not only all the climates of the world in a general sense, but in the particular sense which fits it for one kind of vegetation rather than another. Climate and soil, as they relate to heat, cold, and fertility, are not the only things which

adapt a place for the growth of all plants. If there is such a spot on the globe, it should now contain types of all the species of plants, now found in all the great divisions of the earth;—if there is such a spot, it must not only have thermal divisions agreeing with the peculiarities of all other parts of the globe,—but must be laid out with mountains, oceans, lakes, rivers, deserts,—every variety of minerals and soils, currents of air, dryness, moisture, and the thousand things which constitute the infinite variety of climates and soils, adapted to different vegetables. We know of no such spot. The vegetation of every great division of the globe differs essentially from that of every other; and this difference is produced not more by the mean temperature of a climate, than by the extremes of heat and cold, and their distribution through the months of the year;—not more by the general fertility of a soil, than by the presence or absence of certain metals, salts, and earths. These circumstances are much influenced by causes peculiar to the several divisions of the globe, which cannot be supposed to be combined in any one locality. Thus we find the Botany of New Holland, Asia, Africa, Europe, and North and South America, to differ in many instances generically, and on many more specifically, from each other. So, also, is the character of vegetation sometimes influenced in the same continent, in a very important manner, by a particular location of mountains, deserts, salt or fresh water lakes or seas, in regard to prevailing currents of winds. Africa, south of the Sahara Desert, presents a wholly differ-

ent botanical aspect from northern Africa. Humboldt estimates the species of phanerogamous plants (having visible organs of fructification) of the world at 36,000, of which Europe has 7,000—Asia 6,000—Africa 3,000—New Holland 5,000—and North and South America 17,000. America, therefore, has nearly one half of the whole number; and yet, if the theory of one single centre of distribution of vegetation is correct, how does it happen that America has nearly three times as many species as Asia, which must have been the seat of that original centre of distribution? It would certainly be reasonable to expect that some part of Asia should possess a type of each species distributed; or, at least, that Europe, Africa, or New Holland, would be more likely to be supplied with the seed than America. Such, however, is not the fact; for America has 10,000 more species than Europe; 11,000 more than Asia; 12,000 more than New Holland; and 14,000 more than Africa. Whence arose this excess in a continent so remote from the supposed centre of distribution? It cannot be accounted for on the theory of a single centre of distribution.

In regard to the remaining two hypotheses, it is unimportant, as regards the object we have in view to establish, which of them is adopted by the reader; because whether plants were distributed from several centres located in different parts of the earth; —or spontaneously sprang up wherever a suitable soil and climate were found, the inferences to be drawn from either, as they relate to the probable distribution of man, would be the same. It is proper, however, to

say that a theory in any respect founded upon chance, or accident, in the arrangement of the organisms of the earth, is at variance with any and every known scientific truth; and, therefore, that vegetation sprang up spontaneously, wherever a suitable soil and climate were found, by these agencies alone, without the agency of creative power, would be to confer a creative power upon insensible, inorganic materials, —which is absurd. At the same time, we must not limit the ubiquity of Almighty power by our own narrow notions, or by any mode of human action. We can conceive it to have been just as easy for the Creator to have exercised his energies broadcast, as by a single centre or many centres of distribution. The same Being who said, "Let there be light, and there was light," said also, "Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind whose seed is in itself, upon the earth, and it was so." This favors no theory of centres of distribution. "It was so" that each botanical region, by the mere energy of His word, or by His ubiquity of power, produced the vegetation which had been designed for it by Infinite wisdom and benevolence. Nor is it necessary to suppose that a single vegetable of every species spontaneously grew in its proper location, when the energy of the divine command called it into being; for it is as easy to conceive that the whole earth was arrayed in all its beauty and luxuriance, at the moment it was so ordered, as to suppose one individual of the thousands which now clothe the earth, to quicken from nothing. We can give no reason why the

Almighty should proceed in the work of creation by centres for distribution, except by presumptuously making man the analogue of his power. Man might proceed in this way, to save labor and time, if these were, or could be, important to a Being with powers adequate to the task; but we cannot understand how either labor or time should be necessary to Him who is Omnipresent, and whose simple *will* has sufficient energy to spread out the heavens, call forth systems of worlds, and establish perpetual laws for their government.

But although vegetables may have been simultaneously created, originally, in all spots of the earth adapted to their growth, it by no means follows that they should not also be distributed by the operation of many agencies. We know this to be true; for there are scarcely any of our valuable agricultural products indigenous to the countries in which they are grown. It sometimes happens that the introduction of a plant, by accident or design, after a time, may spread over vast tracts and take possession of the soil, to the exclusion of natives. A species of artichoke, introduced from Europe, thus took possession of the country at Buenos Ayres, which is thus described by Mr. Head in his "Sketches of a Journey across the Pampas."—"There are three regions of vegetation between Buenos Ayres and the base of the Cordilleras, a space of 900 miles; the first of which is covered, for 180 miles, with clover and *thistles*. This region varies with the season of the year in a most extraordinary manner. In winter the leaves of the thistle are large and luxuriant, and the whole sur-

face of the country has the rough appearance of a turnip field. The clover in this season is extremely rich and strong; and the sight of the wild cattle grazing in full liberty on such pasture is very beautiful. In spring the clover has vanished, the leaves of the thistle have extended along the ground, and the country still looks like a rough crop of turnips. In less than a month the change is most extraordinary; the whole region becomes a luxuriant wood of enormous thistles, which have suddenly shot up to a height of ten or eleven feet, and are all in full bloom. The road or path is hemmed in on both sides; the view is completely obstructed; not an animal is to be seen; and the stems of the thistles are so close to each other, and so strong, that, independent of the prickles with which they are armed, they form an impenetrable barrier. The sudden growth of these plants is astonishing; and though it would be an unusual misfortune in military history, yet it is really possible that an invading army, unacquainted with this country, might be imprisoned by these thistles before it had time to escape from them. The summer is not over before the scene undergoes another rapid change; the thistles suddenly lose their sap and verdure, their heads droop, the leaves shrink and fade, the stems become black and dead; and they remain rattling with the breeze, one against another, until the violence of the pampero, or hurricane, levels them with the ground, when they rapidly decompose and disappear, the clover rushes up, and the scene is again verdant."

The potatoe, a native of South America, is now

grown over the greater part of the world. There are many plants, both ornamental and useful, which may be made, by the art of man, to grow in many climates, in which, if left without culture, they would perish. This is more especially the case with vegetables necessary for human subsistence; which appears to be in obedience to the doom pronounced upon Adam, that "in the sweat of thy face shalt thou eat bread." Although human art and industry may cultivate and sometimes acclimate plants out of their original habitations, yet this is not always necessary for them to extend their migrations. The Canada thistle is a familiar example of the migratory power of plants, to the vexation of agriculturists in the Northern States; and its gradual extension to more southern latitudes is evinced by its slow, but sure progress southward.

Having thus very summarily disposed of the distribution of vegetation, and taken a view of it so far as it is important to our subject, we pass now to take a like hasty view of the distribution of animals, exclusive of man.

A history of the geographic distribution of animals, in a truly scientific method, would be a subject of great difficulty. Fortunately the subject we design to illustrate by it, does not require the nice and accurate details the science would demand. It is not required of us to ascertain the precise range of animals, either as it regards continents, or particular localities, in any other than a general manner. Consequently it is the broad outline—that which particularly distinguishes one great division of the earth

from another, in regard to animated beings, which demands our attention.

This subject is marked by stronger and broader lines of difference than vegetable distribution; for although each of the great divisions of the earth contrasts distinctly from every other by its botany, yet there are many species of plants which are found in all the great divisions of the globe. This is not true, however, in regard to animals. It is doubted whether the Continents of Africa, and South America, and Europe, and North America, excepting the Polar regions, have a single example of the same species of animals indigenous to them.

So close is the connexion between the vegetable and animal kingdoms, that a difference of the vegetables of any countries is always accompanied by a corresponding difference of animals. This is more observable in the small and delicate, than in the large and robust animals. Insects, in particular, whose world is a single leaf, are always found to accompany the plant they affect. The Cochineal of Mexico is exclusively found upon the Cactus, which grows in no other country. But we prefer to illustrate our subject by examples from larger animals, not because insects are really less important in the scale of creation, but because most readers attach higher ideas to magnitude,—to what immediately strikes the senses as important, because it is large, than to what appears to them unimportant, because it is small.

New Holland affords the strongest contrasts to other parts of the globe, in every department of

organic nature. This great division of the earth, probably, affords the best possible proof that animals were not distributed from any single centre; because many of its genera are remarkably distinct from those of Asia, and all other parts of the earth. Mr. Field says—"It is in New Holland where it is summer when it is winter in Europe, and vice versâ; where the barometer rises before bad weather, and falls before good; where the north is the hot wind, and the south the cold; where the humblest house is fitted up with cedar; where the fields are fenced with mahogany, and myrtle-trees are burnt for fuel; where the swans are black and the eagles are white; where the kangaroo, an animal between the squirrel and the deer, has five claws on its fore paws, and three talons on its hind-legs, like a bird, and yet hops on its tail; where the mole lays eggs, and has a duck's bill; where there is a bird with a broom in its mouth instead of a tongue; where there is a fish, one-half belonging to the genus Raia, and the other to that of Squalus; where the pears are made of wood, with the stalk on the broader end; and where the cherry grows with the stone on the outside."

As if to show us that, in the forms of organic structure, the Creator was only limited by His own will, He has appropriated to this region, forms the reverse of those of every other. Australasia and America are the only quarters of the globe which have the singular animals called marsupials; but those of Australasia agree with those of America in nothing but the pouch, or sack, to hold their

immature young. The three old Continents have no animal of the same genus, and of course none of the same species, and therefore could not have been the locality of any centre from which they have been distributed.

Asia is distinguished, in its zoology, in an especial manner, by containing the types of nearly all of our domestic animals. The horse, the cow, the sheep, the hog, and common fowl, are all natives of this Continent. Asia is naturally divided into several zoological provinces, indicated as well by her geographical features, as by the climate peculiar to each. The stupendous mountain ranges of Altai and Himalaya; the vast deserts of Cobi, Shamo, and Arabia; and the jungles of Hindostan and Malacca, impress upon this Continent a zoology as various as it is distinct. The camel of Western Asia and Northern Africa supplies the place of the elephant of South-Eastern Asia and Southern Africa. He is found nowhere else; and, by combining the qualities of the horse and ox in usefulness, and exceeding either in capability of enduring thirst, he is admirably fitted for the wastes he is compelled to travel.

But the peculiarity which distinguishes the zoology of Asia must be looked for in the middle, southern, and eastern parts of the Continent. Here we find a peculiar horse called dziggtai, so wild that it is untamable, and so fleet that it outstrips, with ease, the fleetest Arabian steed that ever scoured the desert. Here are, also, the musk-deer, the ourang outang, the long-armed ape, the four-horned

antelope, and the royal tiger, all of which are exclusively Asiatic. The brown rat, the troublesome pest of our houses and barns, is also a native of this region. The ornithology of this region is exceedingly rich in the Gallinaceous tribes. The peacock, the most splendid of all our domestic poultry; the ring, golden, and pencilled pheasants, have here their homes, and have been domesticated. The crowned, argus, cryptonyx, horned, and impeyan pheasants, also adorn their scenery.

A minute zoological history of Africa would present many analogies to that of Asia. The dziggtai is represented in Africa by the zebra, an animal as beautiful, as untamable, and almost as fleet, but of decidedly different species. So, also, the ourang outang is represented by the chimpanzee, of Guinea, and adjacent counties; an animal which approaches nearer to the human form than any other. The Asiatic lion, and royal tiger, by the African lion, panthers, and leopards.

From the geographic position, and much more from the geological formation of this great Continent;—from the immense ocean of sand which extends from the Atlantic to Egypt, as well as many smaller seas of the same comparatively fluid earth; from the intense tropical heat, increased by the arid nature of the soil, and the long-continued absence of rain;—from all of these causes acting together, the naturalist expects to find, not only a difference of vegetation, but of animated nature. The fantastic forms of New Holland, or the majestic splendor of Asia, need not be looked for in the gloomy and

arid wastes of Africa. She has her green spots in zoology, as she has her oases in her deserts; but her general character is that of gloom and grandeur;—of strength, ferocity, and magnitude, rather than of beauty, variety, and gentleness.

The hippopotamus, the giraffe, the gnu, the spotted hyena, the zebra, &c., all of which are peculiar to the country, mark it as a distinct zoological province. So, also, the difference of species of those inhabiting this region, of the same genera as those of Asia, confirms the separation. The lion, the elephant, the rhinoceros, the chimpanzee, the apes, &c., of this Continent, are not of the same species as those of Asia.

Of the birds of this Continent, one has been added to our poultry-yard; not so much for its beauty or delicacy of flesh, but for the numerous eggs it lays, and its noisy screams, which are said to protect the more valuable stock from the depredations of hawks. The African snake-eater, the griffard eagle, the chanting falcon, &c., together with some singular butcher-birds, separate the rapacious tribes from those of other regions. Of songsters, the whole of Africa may be said to have none; nor has she many of brilliant plumage, compared with other tropical regions; but her beautiful plantain-eaters, shrikes, thrushes, weavers, together with the elegant little sugar-eaters, or sun-birds (cynniris of Cuv.), which are only inferior to the humming-birds of America, are a few of those which give to this gloomy region some of the beauties so abundantly scattered elsewhere. The honey-guide, if not beau-

tiful, is peculiarly African, and deserves the veneration bestowed upon it by the inhabitants. We had almost forgotten the ostrich, which, of itself, is sufficient to establish Africa as a distinct zoological province. It is nowhere else found, and could scarcely have been distributed from a single centre together with the birds and beasts of New Holland, Asia, and Europe.

The zoology of Europe is not decidedly distinguished by its quadrupeds from other provinces. New Holland has the kangaroo, duck-bill mole, &c.; Asia the royal tiger, the dziggtai, the horse, &c.; and Africa the hippopotamus, the giraffe, &c., all of which belong exclusively to them; but the bears, the wolves, the foxes, cats, deer, beavers, &c., of Europe, some of which are specifically different from other great quarters of the globe, do not afford any very marked examples of a distinct zoological province. Africa, north of the Great Desert, Asia, west of the Euphrates, and Europe, south of the Frigid Zone, might, with some propriety, be considered as one province. Nor does she present to us many of the beautiful specimens of birds, which we have seen to abound in other regions; but it is a matter thought worth a little boasting, by some eminent European writers, that Europe, the seat of the Caucasian race of men, is also the habitation of the greatest number of typical genera of birds, in proportion to the extent of territory, especially of the noble birds of prey. W. Swainson, Esq. in his excellent article in Murray's "Encyclopædia of Geography," vol. i., p. 269-270, says another character in European ornithology

deserves attention. This regards the superior number of generic types which it exhibits, in proportion to the number of species. These genera amount to 108, omitting those which have not generally been adopted, or which, from the modifications of form being but slight, should more properly be termed sections. The proportion which these genera bear to the number of species (estimated before at 388) amounts to more than two to seven; or, in other words, does not give seven birds to two genera. It is further remarkable, that most of these exhibit, *in their structure, the greatest perfection* of those orders or families to which they respectively belong, and which groups are denominated by naturalists *typical*. True it is that such genera are widely dispersed; but in no division of the earth do they appear so numerous, in proportion to the species, as in Europe. This remark not only applies to the typical genera, but is frequently applicable to the number of species they respectively contain. One instance may suffice. The noble falcons, or those to whom the generic name of Falco is now restricted, are generally considered the most typical group of their family: of these, the kestrel and five others have their metropolis in Europe and Northern Africa. The whole of North America has hitherto produced but four. Le Valiant enumerates the same number from Southern and Central Africa. Those of Central Asia are not known; but only two have been recently described as peculiar to the vast regions of Australia. Now, if we merely look at these respective numbers, the difference does not appear very remarkable; but

when the great inferiority between the Caucasian regions and those of America, Africa, and Australia, *in point of extent*, is taken into the account, it will be immediately seen that the proportion of these eminently typical species in the European regions is particularly great. Among the typical groups of the wading and swimming birds this is still more apparent; so that if we endeavor to define what is the most striking feature in the ornithology of this zoological province, none is so remarkable as the number of purely typical groups. This peculiarity will be more apparent on looking further into the matter. The total number of birds throughout the world, existing in Museums, or clearly described in authentic works, may be estimated at 6000. These have been arranged under about 380 genera; but as several of these genera will comprise more than one sub-genus, we will put down 400 as a nearer approximation to correctness. This would leave rather more than fourteen species to each generic group; while, if the ornithology of Europe and North Africa is alone considered, the proportion is no more than one to three; and even this will be further diminished when those geographic groups among the *Fringillidæ* and *Sylvaidæ*, which are decidedly peculiar to this portion of the globe, are investigated and defined. Now, it is very singular that, in speaking of the leading varieties of the Caucasian race, a writer, whose testimony is no mean authority, observes, "that the tribes among the Caucasians are more numerous than in any other." And again—whether we consider the *several*

nations or the individuals in each, bodily differences are much more numerous in the highly civilized Caucasian variety than in either of the other divisions of mankind." (Lawrence, pp. 442, 475.) "When we glance over a list of those nations generally supposed to have sprung from this type, we are struck with the justice of these observations. It is the more remarkable as the regions they occupy are disproportionably small, when compared with those peopled by the Mongolian and Ethiopian races. That there are instances wherein typical forms of higher groups than genera do *not* occur within the European range, is a circumstance which will not materially affect the question. Thus the only European bird belonging to the *Tenuirostres* of M. Cuvier is the European Hoopal (*Upupa Epops*), which is certainly not a typical example; but this, so far as tribes are concerned, is the only exception to the rule. *It is curious also*, that this exception should occur in that division which comprises the *smallest and weakest of birds.* If we descend to families, there is scarcely one *pre-eminently typical of its own perfection* which is not European. A further objection may possibly be urged, that, although such forms are indeed abundant in this Fauna, they are nevertheless found in nearly every other part of the world; and cannot, therefore, be looked upon as characterizing Europe more than any other country: but this will not be a just conclusion, unless it is first shown that the proportion of such types to the total number of European species is not decidedly greater

than in any other region. Now the facts we have already stated prove this beyond a doubt."

"These results," continues Mr. Swainson, "obtained from unquestionable data, are so important to our present inquiry" (the distribution of man) that their hasty notice would not have been sufficient. The materials for illustrating the ornithology of Europe are naturally more numerous than can be expected for other portions of the globe; and it became very desirable to ascertain how far the ornithology of those regions, occupied by the Caucasian race, presented a peculiarity of character *sufficiently strong to show a mutual relationship with the geographic distribution of this variety of man. We are, I think, sufficiently authorized to consider that both are in unison. At least there are so many singular points of analogy as to render it highly probable that there exists an intimate relationship between the distribution of one race of mankind, and one of the principal geographic divisions of birds.*"

The ingenuity which can find matter of triumph to the Caucasian race of men, in the meagre zoology of Europe, is a cause for congratulation. It is an undoubted evidence of that strenuous temperament which belongs to the race, and which has carried it forward in all of the items of power and of civilization beyond all of the other races. It smacks a little of vanity, it is true; but then there are no Ishmaelites, Japhethites, nor Canaanites, sufficiently advanced in the sciences to hold us up to the ridicule of a learned world: and we Americans, although natives of the new world, feel too deep an interest in our progenitors

to find fault with anything which advances them on the scale of creation. Be it so, then, that the birds of Europe, in their distribution, are the analogues of the Caucasian race which inhabits it; and that as they exhibit, "in their structure, the greatest perfection of those orders or families to which they respectively belong," as compared with birds of other quarters of the globe, therefore the Caucasian race of men have likewise a greater perfection" in their structure; and that they have been distributed together—because they have an "intimate relationship" in these respects.

But our object in introducing this quotation is to save us the trouble of showing that Europe is a distinct zoological province, which we will take for granted is accomplished by it.

We lastly pass to America. The very peculiar arrangement of this Continent, extending north and south from the Arctic almost to the Antarctic circles, together with its peculiar geographic features, which distinguish it remarkably from the old world, give to it a general climate in many respects different from Europe, Asia, or Africa. In all of these latter Continents the great chains of mountains run east and west; but in America they run north and south, parallel to the ocean coasts. The Rocky Mountains stretch from the northern extremity of North America, through the Isthmus of Darien to the Straits of Magellan in South America. Again on the eastern side of the Continent, another vast mountain chain extends from Hudson's Bay, in the north, which is lost in the plains of La Plata in South America, sinking in the gulf

of Mexico, except where their peaks give rise to the West India islands. These two extensive chains of mountains form a great central valley, throughout the greater part of North and South America; pouring out, from their sides, innumerable rivers, which, while they water and fertilize the regions through which they flow, at length unite, and form the immense rivers for which the Continent is remarkable. From their eastern and western sides issue innumerable important though comparatively small rivers, which flow to the Atlantic and Pacific Oceans. Throughout this whole extent of country there is not a single desert, deserving the name compared with any found in Asia, to say nothing of Africa; for what is called a desert, at the foot of the Rocky Mountains, is only so in comparison with the luxuriant fertility of the other part of the Mississippi valley. Compared with the arid wastes of Asia and Africa it is a fertile plain. The deserts of Alacama, and of Pernambuco, in South America, are comparatively insignificant.

A vast region of country so highly favored in its physical characteristics, affords to the botanist the richest possible field for enjoyment. He is everywhere struck with delight and astonishment. It appears as if the Creator had reserved the full display of his bounty, beauty, and magnificence, in his works, for this region, which, if not the last work of his power, is at least one of the last that his most exalted creatures were permitted to possess. In tropical America, in particular, it would be difficult for any one who had not visited it, to form an idea of

the lavish luxuriance everywhere prevalent. The whole earth appears to be crowded with the greatest possible profusion and variety of vegetation. Magnificent trees of an endless variety and beauty of foliage, are loaded with as endless a variety and beauty of flowers and fruit; while their noble trunks are almost hidden by parasites, whose flowers contend with those of the trees, both in beauty and fragrance. But we forget that our business is now, not with its botany, but with its zoology; and that, in this respect alone, the highest powers of description of a better gifted pen than we hold, must fail in doing it justice. Who, but He who made them, could paint to the eye the colors, the elegant forms, the rapid motions, the perched like steadiness, of the innumerable family of humming birds, as they dart from flower to flower, or appear to rest upon its bosom while they sip the nectar it contains? Such is their number, and such their infinite variety of colors, sizes, and shapes, that every flower in this prolific region appears to have a living representative of all its beauties in this family.

There are upwards of seventy species of these little bijoux of creation, all of which belong to America; and which would, in themselves, be sufficient to establish it as a distinct zoological province. But we are not confined to a single family in our selections; for the difference of species of the whole fauna of the new Continent, excepting the Arctic regions, from those of the old Continents, is so universal, that it is a rare thing to find any which agree. We will content ourselves with but one other ornithological example, the inimitable mocking bird, which might be called

the king of the songsters of the world, if he were not so far beyond any in strength, clearness, variety, and richness of tone, that he would acquire no honor by being enthroned their monarch. No bird, from the scream of the eagle, the crow of the cock, and the cackle of the hen, to the chirping of the tit, is beyond his inimitable powers; but his own notes, uttered more frequently at night, to cheer and beguile the tedium of his incubating partner, call forth his highest efforts. Perched on the top of the hedge, he performs a brilliant and rapid prelude; he then shoots up in the air, his performance increasing in interest with the distance, by a breathless desire in the auditor to catch every note; until anon it again swells upon the ear until it acquires the full compass consistent with harmony, when it again gradually fades, as he settles upon the limb, near to her for whom this divine solo was performed.

Our delightful ornithological examples, which we would easily multiply, so decidedly prove a distinct zoological province, that it is almost unnecessary to furnish others from quadrupeds, but these are so numerous, that we are constrained to give a few to show that our Continent has not been sparingly supplied. The grizzly bear, if we except the Polar bear, is not only the largest, but of all the carnivora of the Continent, the boldest, strongest, and most to be dreaded. He may be regarded as the monarch of his range, as the lion is of the old world. The musk ox, the great American elk, the opossum, the tapir, the armadillo, the ant eater, the sloth, and the lama family, all of which are decidedly Ameri-

can, are a few of the many which might be given to establish this as a decidedly distinct zoological province from the old world.

We have now taken a very rapid and general, but at the same time a strikingly distinctive, view of the five great zoological provinces of the globe. It is now proper to inquire, whether it is at all probable,—nay, whether it is possible rationally to suppose, that all animals were created on any particular spot, and from thence distributed over the earth.

In our remarks upon botanical distribution we said, that it was not only necessary that some spot in Asia should be shown to possess all the climates of the world, in a general sense, as it regarded heat and cold, but in that particular sense in which the climate of every country differs from another, even under the same isothermal lines;—in the sense in which the climates of Europe and America, tropical America and Africa, differ so materially from each other. We also remarked, that if all plants were originally distributed from such a centre, it, or its vicinity, at least one of the old Continents, would be likely to possess types of all the genera and species. These remarks apply with increased force to animal distribution; for no agency, short of Almighty power, can be supposed adequate to the distribution of tropical land animals across oceans. Winds and waves are not competent to the task. Marine monsters could not, and would not, lend a helping hand. Man, if he had had the power, and all the necessary knowledge, would only transport such as were useful to himself; but he had neither the power nor

the knowledge, until recently; and we know that he has not done it. Let us suppose all of these difficulties to be overcome, how came it that New Holland has animals of different genera and species from Asia? From whence came those in America, so different from those of Europe, Asia, Africa, and New Holland? Distribution can only relate to the subjects to be distributed; but the old world never had the fauna of New Holland and America; and therefore could not distribute them. From whence did they come? "And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven."

"And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping things, and beast of the earth after his kind: and it was so."

As with vegetation, so with animals; they were spontaneously and simultaneously created in the places suited to them. But there are some verses, in the second chapter of Genesis, which appear to apply to animals, and not to vegetables.

"And 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 whatsoever Adam called every living creature, that was the name thereof."

"And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field."

If these verses should be construed literally, the subject must be regarded as settled in favor of a

single centre of distribution; but a literal construction would be so directly opposed to the constitutional organization of the animal kingdom, that if any other rational construction can be adopted, without any violence to the text, we should feel ourselves constrained to follow it. The Almighty could easily have accomplished the whole by a miracle, if he desired it. Creation itself is a miracle of infinitely greater magnitude than would be a distribution of exclusive genera and species to remote parts of the globe; but Jehovah has so uniformly preferred to act in conformity to His natural laws, that we are not justified in ascribing everything to a miraculous exertion of His power, which, at the moment, we cannot understand. We have already alluded to this subject, and will not now enlarge upon what we have said. We again refer to the able work of Dr. John Pye Smith, *on the Relation between the Holy Scriptures and some parts of geological science*, in which the subject is handled with powerful reasoning and accurate erudition.

The distribution of man is our next subject. The facts in regard to his distribution are not left to conjecture; for we can trace every species of man, from the earliest period, to have been derived from Asia, independently of Scripture, with a degree of certainty amounting to conviction. Nay, profane history and the traditions of ancient nations, without revelation, produce a moral certainty in the mind of any honest inquirer after truth, that the valley of Shinar, about ancient Babylon, was the original centre of distribution of mankind. Indeed it is a

matter of fact at this day, that while all the other great divisions of the globe have, originally, only one species of men for inhabitants, Asia contains in her bosom types of every species of the human family, except the Negroes, if they should be excepted: and it is within the reach of history that the woolly-headed Negroes anciently occupied at least a part of Northern Arabia, which was then called Ethiopia.

The recent splendid discovery of Young and Champollion the younger, of the key to the Egyptian hieroglyphics, connected with previous discoveries, furnishes us with a very remarkable example for our purpose. In the tomb of *Ousirei*, at Thebes, a King of Egypt, contemporary with the bondage of the Jews, on the walls of one of the apartments, is sculptured a procession in which are exhibited, together with the natives, or subjects of *Ousirei*, three distinct races of men distinguished by their costumes, their features, and complexions—the Israelites, Redmen, Negroes, and the Shepherds, or Hyckschos. The painting is said to be well preserved, and to have been well executed. It is remarkable, too, that these Shepherds are represented with fair hair and blue eyes, circumstances to which we will have occasion hereafter to refer. Thus we find, that, nearly 4000 years ago, types of all of the species of men (and three varieties of one species), except the yellow or Mongolian species, existed in Egypt or its vicinity: and the Mongolian species we know, from their own undoubted re-

cords, to have inhabited Western Asia several centuries prior to this period.

In our remarks respecting vegetable and animal distribution, we said, that, if they had been dispersed from any single centre, the neighborhood of that centre should yet possess types of all the genera and species distributed. Such is not the fact; nor does it appear from the writings of any of the ancients, sacred or profane, who abounded in imagery, that the vegetables and animals peculiar to Australia, America, or Southern Africa, at any time were natives of Asia, or its immediate vicinity. This is a strong circumstance to show that there was no such centre of distribution for these organisms. It also proves that, in this respect, they are not analogous to the human family; and, therefore, that inferences from analogy, that because vegetables and animals were simultaneously created in all parts of the earth, therefore man was so created, are contradicted by all the facts in his history, as well as by the sacred volume.

The constitutional organization of man, so very different from other organisms, confirms the probability that he was created on one spot, and from thence distributed. Omnivorous, he finds no difficulty in changing his diet, in conformity with the climate he may inhabit, and the circumstances which surround him. Though naked, he is endowed with the power of clothing himself, to accommodate himself to all climates. Ingenious in contrivances, he can transport himself over oceans, mountains, and deserts. Courageous and

migratory, curious, and possessing an insatiable desire for knowledge, riches, and power, beyond any other creature, he braves all climates, if not with absolute impunity, at least with a constitutional ability which soon enables him to overcome all obstacles. A being so endowed, could safely be intrusted with his own dispersion. Vegetables and animals possess no such attributes to enable them, by their own constitutional ability, or by volition, to flourish in all climates. A few of each kingdom, by the art of man, may be made to grow and propagate in regions in which they soon would perish without his care. So, also, some few become acclimated, or naturalized, to a new soil and climate, and continue freely to thrive and multiply without further care; but these are always under peculiarly favorable circumstances, making their new abode not very different from their native habitations.

There is, therefore, no analogy between vegetables, animals, and man, in their constitutional ability to migrate. In respect to the two former there appears to have been an absolute necessity for them to have been distributed by the Almighty, or the profuse variety manifested in the different botanical and zoological provinces, and their adaptation each to the other, could never have taken place;—and in respect to man there appears to be no such necessity, as he is endowed with powers every way qualifying him for, and at the same time insuring his distribution to, all regions. Therefore there is no analogy between these kingdoms and man, in regard to con-

stitutional ability to endure a distribution from a single centre, to all climates.

Although all the languages of the world exhibit undoubted evidences of having originated from a common stem, yet the diversity of genius and structure in the three great original tongues, the Shemitic, Japhethic, and Canaanitic, when compared with each other, exhibit evidences of a disruption, of a nature so abrupt, that it can only be accounted for by the miraculous confusion recorded by Moses. In each great family, or species of men, the diversities of dialects have so strong a filiation that most of the important words of any the most modern tongue, may be traced through them all, by an expert philologist. This is especially true in respect to the Shemitic tongues, with which we are most familiar; and, so far as our limited knowledge extends, is equally true in regard to the other great families of languages, the Japhethic and Canaanitic. But, except in a few isolated instances, some of which we will presently detail, little or no etymological connexion can be traced between the three great original tongues. The Ishmaelitic language, on the contrary, bears the impression of the Shemitic family, because it originated in this family nearly four hundred years after the dispersion at Babel; thus furnishing another remarkable instance of the accuracy of the Mosaic history.

The customary distribution of the human family, —viz. the Japhethites in Europe and Western Asia, mingled with the Shemites; and the consequent filiation of the Shemitic and Japhethic tongues, appears to us to be not only unphilosophical, but con-

trary to the Mosaic distribution,—"*after their tongues, in their countries, and in their nations.*" The physical characteristics of the great original families, or species of men, are also as diverse as their languages. But we have already examined Josephus's distribution of the Patriarchs, and will have occasion to refer to the subject hereafter; we will therefore close this chapter by an extract from Dr. Good's "Book of Nature," applicable to a single centre of distribution for the human family.

"There is in all languages of the earth a general unity of principle," says Dr. Good, p. 297, et seq., "which evidently bespeaks a general unity of origin; a family character and likeness which cannot possibly be the effect of accident. The common divisions and rules of one language are the common divisions and rules of the whole; and, hence, every national grammar is, in a certain sense, and to a certain extent, an universal grammar; and the man who has learned one foreign tongue, has imperceptibly made some progress towards a knowledge of other tongues. In all countries, and all languages, there is only one and the same set of articulations; or at least the differences are so few, that they can scarcely interfere with the generality of the assertion: for diversities of language consist not in different sets of articulations, but only in a difference of their combinations and applications. No people have ever been found so barbarous as to be without articulate sounds, and no people so refined and fastidious as to have a desire to add to the common stock.

"But independently of an uniform circle of articu-

lations, and an uniform system of grammar, there is also an uniform use of the very same terms in a great variety of languages, to express the very same ideas; which, as it appears to me, cannot possibly be accounted for, except upon the principle of one common origin and mother tongue; and I now allude more particularly to those kinds of terms, which, under every change of time, and every variety of climate, or of moral or political fortune, might be most readily expected to maintain an immutability; as those, for example, of family relationship and patriarchal respect; or descriptive of such other ideas as cannot but have occurred to the mind very generally, as those of earth, sky, death, deity."

We will not follow him through the details of the examples he has given to illustrate these positions. He has collected a number of words which run through all languages ancient and modern, civilized and savage. "*Papa* and *Father*;" "*Al, Allah, Theus, or Deus*, and *God*;" "*Mor, Most, or Mut*" for death; "*Sir*;" "*Man*;" "*Youth* and *Young*;" "*Regent*;" "*Name*;" "*Cow*" and *Mouse*."—His remarks and illustrations upon these words are judicious and convincing, which he concludes as follows; "all, as I have already observed, confederating in proof that the various languages, and dialects of languages, that now are, or ever have been spoken, have originated from one common source; and that the various nations that now exist, or ever have existed, have originated from one common cradle or quarter of the globe, and that quarter an eastern region."

"Finally," he continues, p. 301, "and before I

close this argument, and deduce from it its fair and legitimate result, let me pointedly call your attention to that most extraordinary act of correspondence between all nations whatever, in all quarters of the globe, wherever any trace of the art exists, which is to be found in their employment of a decimal gradation of arithmetic; an argument which, though I do not know that it has ever been advanced before, is, I freely confess to you, omnipotent of itself to my own mind. Let me, however, repeat the limitation, *wherever any trace of this art is found to exist;* for in the miserable state to which some savage tribes are reduced, without property to value, treasures to count over, or a multiplicity of ideas to enumerate; where the desires are few and sordid, and the fragments of language that remain are limited to the narrow train of every-day ideas and occurrences, it is possible there may be some hordes who have lost the art entirely; as we are told by Crantz, is the case with the wretched natives of Greenland, and by the Abbé Chappé with some families among the Kamschatkadales; while there are other barbarian tribes, and especially those of America, who cannot mount higher in the scale of enumeration than five, ten, or a hundred: and for all beyond this point to the hair of their head, as a sign that the sum is innumerable."

"But, putting by these abject and degenerated specimens of our own species who have lost the general knowledge of their forefathers, whence comes it to pass, that blacks and whites in every other quarter, the savage and the civilized, wher-

ever a human community has been found, have never either stopped short of, nor exceeded, a series of ten in their numerical calculations; and that as soon as they have reached this number, they have uniformly commenced a second series with the first unit in the scale, one ten, two ten, three ten, four ten, till they have reached the end of the second series; and have then commenced a third with the next unit in rotation; and so on, as far as they have had occasion to compute? Why have not some nations broken off at the number five, and others proceeded to fifteen before they commenced a second series? Or why have the generality of them had anything more than one single and infinitesimal series, and consequently, a new name, and a new number for every ascending unit? Such universality cannot possibly have resulted, except from a like universality of cause; and we have in this single instance alone, a proof equal to mathematical demonstration, that the different languages into which it enters, and of which it forms so prominent a feature, must assuredly have originated, not from accident, at different times, and in different places, but from direct determination and design, at the same time, and in the same place; that it must be the result of one grand, comprehensive, and original system. We have already proved that such system could not be of human invention; and what then remains for us but to confess peremptorily, and *ex necessitate rei*, as the fair conclusion of the general argument, that it must have been of divine and supernatural communication?

"It may be observed, I well know, and am prepared to admit the fact, that the examples of verbal concordance in languages radically distinct, and not mere dialects of the same language, are, after all, but few, and do not occur, perhaps, once in five hundred instances. But I still contend the examples, few as they are, are abundant and even super-abundant to establish the conclusion; and the fact on which the objection is founded, instead of disturbing such conclusion, only leads us to, and completely establishes a second and catenating fact; namely, that by some means or other the primary and original language of man, that divinely and supernaturally communicated to him in the first age of the world, has been broken up and confounded, and scattered in various fragments over every part of the globe; that the same sort of disruption which has rent asunder the solid ball of the earth; that has swept away whole species and kinds, and perhaps orders of animals, and vegetables, and minerals, and given us new species, and kinds, and orders in their stead; that has confounded continents and oceans, the surface and the abyss, and intermingled the natural productions of the different hemispheres; that the same sort of disruption has assaulted the world's primeval tongue, has for ever overwhelmed a great part of it, wrecked the remainder on distant and opposite shores, and turned up new materials out of the general chaos. And if it were possible for us to meet with an ancient historical record, which professed to contain a plain and simple statement of such supernatural communication, and such subse-

quent confusion of tongues, it would be a book that, independently of any other information, would be amply entitled to our attention, for it would be an index of commanding authority on its own forehead.

"To pursue this argument would be to weaken it. Such a book is in our hands—let us prize it. It must be the Word of God, for it has the direct stamp and testimony of his works."

It is evident, from the preceding remarks, that "the distribution of vegetables and animals over the earth, is not analogous to the distribution of the human species, and therefore such distribution will not assist our investigations in relation to man."

CHAPTER V.

THE PROGRESSIVE IMPROVEMENT OF MAN, BY INCREASED MORAL AND MENTAL FACULTIES, IS A LAW APPLICABLE TO HUMAN NATURE, NOTWITHSTANDING THE STATIONARY CONDITION OF SOME, AND THE RETROGRADE CONDITION OF ANOTHER SPECIES.

M. Guizot informs us that civilization consists in progress, in the continued advance of the human mind in knowledge and intellectual power. It is not merely the progress of the State, the government, but also of all the individuals composing it. In this sense modern Shemites are advantageously contrasted, not only with all other races, ancient and modern, but also with the ancients of their own species. The elements of civilization exist nowhere but among the Shemites. We will hereafter glance at the causes which have contributed to produce this singular, we may say providential state of things; but our business now is not to investigate civilization as a result of the progress of man exclusively, but the progressive development of the condition of this globe, founded upon the natural law of progress applicable to all beings, organic and inorganic. We shall thus discover, from the first known condition of our globe, to, and including the creation of man, the law of progress was fulfilled by succes-

sive creations; and that since the creation of man in the likeness and image of the Creator, no new creations are necessary, as the progressive improvement of the intellect became the equivalent for them.

The amazing differences in the condition of the different species of men; differences which it is impossible to account for on any theory of the unity of the species; differences which, in the early embryo state of the human mind did not appear, but which have been increasing for the last 3,000 years with an accelerated rapidity: we say these amazing differences must have a deeper foundation than the happening of contingencies, notwithstanding the philanthropy which would embrace all men in one species, one family.

It appears to us that nothing can be more injurious to the best interests of all mankind, than an artificial, instead of a natural division of the human family. An error proceeding from humane intentions may produce as much evil as one proceeding from evil designs. If the Shemitic species, by the special favor of the Creator, is more highly favored in constitution than others,—better adapted to surrounding influences favorable to progress,—does not an increased, a proportionable responsibility rest on this species, to ameliorate the condition of others less favored? How can such a duty be discharged, but by looking at things as they are, instead of as our inclinations and impulses fancy them to be? How could a man be a physician who only knew the nature of medicines, without knowing anything of the human con-

stitution? and who exhibited tonics in a highly inflammatory fever, and refrigerants in an ague? Anciently a knowledge of the human frame was only known from zootomy. It was not until so many blunders were made by this method, that the aversion to human anatomy was happily overcome, and the correct principles of the human system understood. The same thing must take place in the Natural History of Man, if the philanthropist is desirous of doing all the good in his power.

In surveying our globe as a whole, with all of its furniture, from the earliest record of its history, the mind is impressed with the great truth that organic and inorganic beings have arrived at their present condition by a series of changes, through the lapse of ages.

For an indefinite period anterior to the existence of man, to that "beginning" when "God created the heavens and the earth," the Mosaic history is silent, except in respect to the condition of the earth immediately antecedent to the creation of man; when it "was without form and void; and darkness was upon the face of the deep; and the spirit of God moved upon the face of the waters." But there is, nevertheless, a remarkably minute, and chronological history of the whole of this period, lithographed by the hand of Him who composed the Book, upon its leaves and pages, in characters universally legible, and which the world has only recently commenced to unfold and read. We have only read the introduction; but it is so full of entertainment and instruction, that we already know as much, if

not more, of the world, for the period of which it treats, than, was known 500 years ago of the globe as it exists. This history is without dates, according to our chronology; but it is marked by periods which embrace centuries for years, not reducible to our divisions of time, but affording sufficient data to answer all useful purposes.

At the close of this history the Mosaic record commences; not indeed by any sudden disconnexion between the two, which might leave us in doubt whether a gap might not exist between them; but by overlapping each other a little, as if to assure us that we have the entire history. Revelation, therefore, takes up this history, and covers about 1800 years from the creation of man to the Noachian flood; and a little beyond this event, for the purpose of overlapping human evidence, which faintly but unequivocally reaches back to that epoch.

The following are the records from which we expect to prove that progressive perfection and development is a law of nature; which we propose to do, as briefly as possible, by the following method.

From geological history we design to prove that progressive improvement appears to have been a law in the creation of inorganic and organic beings of this world, indefinitely anterior to the creation of man.

From revealed history and coincident scientific facts, we expect to prove that progressive improvement was applicable to the Adamic, as well as the preceding period.

And from human evidence, supported by Revela-

tion and science, we expect to prove that it is also applicable to the period now passing, and is applicable to human morals and intellect.

We begin with Geological history; and although this has been the latest book opened to us, it has already furnished us with more decisive facts, in regard to progressive improvement in the work of creation, than both of the others combined. This might be expected from the fact that it covers a space of time immensely longer than the Revealed and Historic periods. A time during which fire and water were active agents;—during which successive creations were made and destroyed;—during which immense magazines of vegetable and animal deposits were laid up in store for future use, by the united agencies of animals, of fire, and of water: and without which magazines the globe would not be what it now is, a fit habitation for man, created "a living soul," "in the image of God."

For our own purposes, but not according to any system of geology, we divide Geological history into four distinct periods, or epochs, viz.: the Igneous, or Crystalline period,—the Zoophytic period,—the Saurian period;—and the Mammalian period. The reason for thus dividing it will be apparent as we proceed.

The Igneous, or Crystalline period is proved by the rocks which compose it. All of these rocks are more or less crystallized; nay, it may be said that all of the older primary rocks are highly crystallized. Those which are called primary stratified rocks, by geologists, are so called because they are destitute of

organic remains; but they were, probably, deposited by water, while the earth was in a state of transition from the Igneous to the Aqueous condition, before it had sufficiently cooled for vegetable and animal life. No organic remains are found in the rocks of this period. Therefore they are chiefly important to our present subject by exhibiting our globe in a progressive state of improvement, from a condition of Igneous fusion, to another state fit for the growth of vegetables and the abode of animals. And they also tell us that vegetables and animals did not exist prior to the subsequent period, which we have called

The Zoophytic period—We do not desire to be understood as meaning that zoophytes exclusively prevailed during this period; but merely that as they appear to have been the first born of animal creation we think them entitled to give name to the period. They appear to have been followed by small shell fish, crustacea, sauroids, sharks, and other fish, scorpions, insects, pine trees, &c., in the order they are here named. All of the animals and plants are the most simple of their kind. In the Zoophytic period we embrace the Graywacke and Carboniferous periods of geologists.

The Saurian period advances us very considerably in the scale of organic life by introducing to us the enormous saurians, apparently then masters of the world. Also mammalia now first make their appearance, in two species of marsupials, according to Dr. Buckland. Birds also first appear in the latter part of this period, in the Wealden formation.

Our Saurian period includes the red sandstone, oolite, Wealden, and cretaceous formations of geologists.

The Mammalian period is distinguished by the number and magnitude of animals of this class, more than half of which are extinct, and many of them have analogues among living species. We find the chief occupants of the earth, at this period, to be the palæotherium, anaplotherium, laphiodon, anthracotherium, &c., &c.; together with the wolf, fox, racoon, &c. Also the ape, denotherium, tapir, rhinoceros, &c.

Our Mammalian period embraces the tertiary formation of Buckland. We thus restrict it because we think those who extend the tertiary strata to include diluvium, or rather to exclude diluvium, are scarcely warranted by geological facts for so doing. It is not our design to enter upon this controversy, particularly as our arbitrary division of periods, for the special purpose of this subject, gives us an optional latitude. But an important fact, bearing upon this point, has recently been discovered in the town of Montgomery, Orange County, and State of New York, by the discovery and exhumation of an entire skeleton of a mastodon, with a remnant of his last meal preserved in a state which may be examined. They now belong to Dr. Warren, of Boston, who, we understand, intends to publish an account of them.

Our Geological Mammalian period brings us up to that epoch described in the first chapter and first verse of the Revealed, or Adamic period, mentioned

by Moses—" And the earth was without form and void; and darkness was upon the face of the deep; and the Spirit of God moved upon the face of the waters." Before we enter upon the consideration of this latter period, we will make a few remarks upon the preceding periods.

In the oldest or crystalline crust of the earth, there are no organic remains. Whether this globe had been inhabited before this period—or whether the earth was now for the first time progressing to a habitable condition, we know not; but all geologists agree, that the crystallized crust could only have been produced by the action of great heat; and, therefore, that the globe must have been a liquid melted mass, in a process of cooling, when the primary rocks assumed the crystallized condition. Although we do not intend to occupy the time of our readers, by proving this state of the earth, yet it may be important to bear it in mind, as this circumstance is the only rational mode of accounting for the ultra-tropical heat of all parts of the earth, during all the early periods. It is highly probable that the influence of the internal heat of the earth, although it must have diminished successively with each creative period, did not entirely cease to influence climate until after the Noachian flood. Solar heat alone could not have produced a tropical, much less an ultra-tropical climate, in all parts of the earth, at the same time; because its influence is in zones and belts chiefly; nay, its permanent tropical influence is confined to a narrow belt on both sides of the equator. But the organic remains of the whole

of the periods we are now contemplating, however much they may differ one with another of their respective periods, are in every part of the earth ultra-tropical in their characters and natures. This is proved by fossil vegetables as well as animals; for these remains, from their size, and nature, exhibit an ultra-tropical, or tropical habitation, wherever found.

Zoophytes appear to have been the first inhabitants of this earth. These curious little architects of islands appear first to have had their singular powers put in requisition to place carbonate of lime in an accessible position for future use. Of the very lowest order of animal organization; so low that many of the family are with difficulty distinguished from vegetables; so low that they multiply by buds, or gemmules as they are called, which grow like the buds of plants, drop off, and become separate animals—so low that they may be cut to pieces, and each piece be a perfect animal; or one engrafted on another, grow and be perfect; and yet, notwithstanding, of such power that they can build immense structures of solid lime-stone by secretions from their own little bodies.

Crustaceous and molluscous animals appear to be the next in age, or may have been contemporary with zoophytes. They have the same power of secreting carbonate of lime; but not the same architectural instincts, although they have supplied immense stores of this indispensable mineral to the great magazine of nature. We cannot, however, follow the steps in regular order, by which the pro-

gressive development of life is exhibited; and therefore pass on to the Saurian period in which we find animal life more perfectly organized and developed on an enormous, as we before found it on a diminutive scale. In the former period no terrestrial animals, or at least very few are found; but terrestrial vegetables, ferns, pines, &c., abound, of enormous growth. In the Saurian period, on the contrary, land animals became numerous, and particularly the amphibious saurians. Now the vertebrated animals are much more numerous; but it is remarkable that they are chiefly of the cold-blooded race, as if the earth had not yet arrived to the proper condition for the support of warm-blooded animals. A few of these begin to appear in this period; as the two marsupial mammalia mentioned by Buckland, and a few birds; but cold-blooded animals in number and power far exceed them. The remains of about eighty species have been found, most of which, particularly the larger, are extinct. The iguanodon, the largest of the saurians yet discovered, is supposed sometimes to have exceeded one hundred feet. It had a horn on its nose like a rhinoceros. It was herbivorous. Next in size, but far more terrible, was the megalosaurus, which was forty or fifty feet long, with teeth eminently adapted for destruction. This was a land animal; but the ocean also was under saurian dominion. The ichthyosaurus, little less than the megalosaurus and the mososaurus, governed the ocean, as the others did the land. The air also was subject to saurian dominion, in which the pte-

rodactyle ruled as arbitrarily as the others did on land and water.

"With flocks of such like creatures flying in the air," says Dr. Buckland (Bridgwater Treat., p. 224), "and shoals of no less monstrous ichthyosauri and plesiosauri swarming on the ocean, and gigantic crocodiles and tortoises crawling on the shores of the primeval lakes and rivers; air, sea, and land, must have been strangely tenanted in these early periods of our infant world." But their reign was now to pass away, to give place to a more perfect race of animals. Another flood, and another change of climate, imprisoned them in the solid strata of the earth, to be part of the written history of the globe, and more especially of their long reign in it;—and their places were supplied by a higher order of animals, viz.:

The mammalia, now, except the two already mentioned, first make their appearance; and the earth, in its inhabitants, begins to assume the garb it has subsequently worn. The immense cold-blooded animals suddenly disappear, as the warm-blooded appear; as if the climate of the world had undergone a change too great for their cold temperaments, and better suited to the warm constitutions of their successors. But the climate was still ultra-tropical, though probably much reduced from its previous intensity. This is apparent from the vegetables and animals of this Mammalian period being of an ultra-tropical nature, as compared with the animals and vegetables now inhabiting the regions where their remains are found.

Many of the genera, and most of the species, of the animals of this period became extinct with the period in which they were created. As a general rule, it is true, the animals of each period disappear with the period to which they belonged; not indeed so abruptly as to mark each period by an absolute separation; and yet not so gradually as to produce confusion in any. The Saurian period, however, appears to have terminated, at least in all its important types, very abruptly, upon the introduction of the mammalia. The crocodile, alligator, and garial are the only remaining large species, unless the sea serpent should belong to the same family. Some animals appear to have prevailed through every successive period, differing frequently in genera; still more frequently in species, but always preserving their habits and instincts. Such are the zoophytes, univalve, and bivalve shellfish. The singularly constructed trilobites disappeared with the Zoophytic period in which they were created. Sharks run through every period, commencing with the latter part of the Zoophytic. As a general remark it may be said that the species of every period differ, and very frequently the genera; and the remark is still more applicable to periods more remote from each other. The same remarks apply to vegetables. Indeed, in regard to the Zoophytic period another remark may be made applicable to the animals and vegetables then in being. With that Infinite wisdom which establishes means to accomplish desired ends, however remote their fulfilment, the Creator saw the ne-

cessity of lime, coal, and iron for the use of man, whom he designed to place on the earth.

The great business of packing up and storing away these essential minerals occurred in this period. Zoophytes, molluscs, and trilobites, in myriads, were then more occupied than they have since been in their particular department, in packing up carbonate of lime. The vegetable world was in no respect behind them in activity and usefulness. The temperature of the globe was now suitable for a large vegetable growth, and suitable also for its conversion into coal. Land and water appear to have united in the great labor; and the large proportion and unusual magnitude of resinous vegetation which prevailed every where, many of which have since become extinct, or dwindled to dwarfs, may have been necessary for its formation, particularly of the bituminous quality.

Nor must we forget the contributions of the minute infusoria to the important stores of iron and lime, because they are too small to be seen by the naked eye. The microscope has opened this part of God's laboratory partially to our inspection, and we are dumb with astonishment at the insignificant intruments He often employs to effect highly important objects. If the results of the labors of zoophytes and molluscs are subjects of wonder, how shall we express ourselves in respect to these *animalculæ*, billions of which would not equal in size the smallest of the others? Small as they are, it is yet only their skeletons which furnish the magazines of iron ochre, or ore, and the lime stone, so useful to

man; and these not in small quantities, as might be imagined from the size of the shields of which they consist, but in strata of many feet thick, and miles in extent.

It may be proper, before we turn from this subject, to anticipate some objections which may be made to our views respecting the progressive improvement of inorganic and organic life, as established by geology; because it supposes several creations more than, and antecedent to, those mentioned in the sacred volume. It will be immediately perceived that this theory is not liable to the censures so generally and justly passed upon the theories of Linneus, Buffon, Helvetius, Darwin, Monboddo, Lamarck, and others, in regard to the progressive development of organic perfection; because their theories are founded upon the absurd supposition, that the more perfect organisms proceeded from those less perfectly organized, in a regular series of organic efforts to arrive at perfection. Thus, say they, men arose from monkeys; and Dr. Darwin, still more acute, derives them from oysters. Such theories are entirely supposititious, the mere dreams of philosophers, and opposed to facts. Their doctrines are sceptical in the highest degree, because they contradict the Mosaic record of the creation, and have substituted in its place a theory inconsistent with science, and requiring the exercise of faith in a far higher degree than even the authority of their names can warrant. On the contrary, we imagine that we have strictly followed the Book of Nature up to the time when the Revealed Book commences; supplying from the first what the last

has not communicated. We show, from the record itself, made at the times of their occurrence, an improvement in the earth, at successive periods, for the support of organic life, and a series of successive creations to correspond with such improvements. Their theory is founded on a supposition that a species may, by its own vital energies, pass through a series of organic changes from one species to another, and from this to another genus, order, and class. We, on the contrary, agreeably to all known historical facts, believe it to be utterly impossible for such, or any specific change to take place; that variety alone is compatible with generation in the same species, and that specific differences can only be made by creation.

It may also be said, that although it is, in general, true, that geological history proves a series of progressive improvements in organic life, yet it is not universally true, because some shells of the earliest geological period exhibit a more complex structure than those of any subsequent period. This is true. It is also true that shells of every kind were much more abundant then, than they have been since. But granting these complex shells to be more numerous, in proportion to the whole number, it does not affect our position. Complexity of structure, in a mollusc, furnishes no argument against a more perfect exhibition of the *vis vitæ* in a vertebral animal.

It may also be said, that such a progressive improvement of inorganic and organic nature, would seem to imply that the Creator could not make the

globe and its inhabitants perfect, without progressive experience in the work of creation. That in his inexperience he was compelled to make the earth an ignited mass,—to quench it with water,—to create zoophytes and shellfish to begin with,—cold-blooded saurians next,—and mammalia next;—all before he had the proper experience to form man.

We know of no limit to the creative power of God; but such an objector does, because he would have Him do the work in the mode suited to his ideas of good workmanship, without knowing the relations which this speck of creation bears to the whole of His magnificent and benevolent design. We know no reason why God originally made light without the sun, on the first day, and on the fourth day made the sun and moon, as recorded by Moses; nor why He made marine, before terrestrial animals; nor why he postponed man to the last act of his creation. The Adamic creation was a progressive series of acts similar to those previously recorded. The sceptic might make precisely the same objections to the Mosaic history. It is remarkable how singularly Geological history confirms the Revealed, in the order and arrangement of successive creations. But we deny that the work of creation was of an experimental kind, because it uniformly displays a perfection of species which has never required amendment or alteration. The polypi of the Zoophytic period built their habitations as perfectly, and by the same process, as polypi do now; and the sauri were as perfectly organized as any now inhabiting the globe; and the same remark will apply

to the mammalia of the ante-Adamic period. The progressive improvement of organic life appears to have been made in the creation of new classes, orders, genera, and species, to suit the varied condition of the globe. The beings of every period were perfect according to the circumstances which surrounded them; and the changes were made to accommodate new organisms to new circumstances. But why new circumstances? Why was not the globe made perfect, without successive changes? We may retort the questions, Why was "the earth without form and void," and covered with water, as recorded by Moses, from "the beginning?" Why was it necessary to close the Adamic period by a flood, instead of a pestilence? Or why necessary to close it at all, since God had the power, if he had thought proper to exercise it, to prevent the corruptions which caused it? The answer to the whole is, that infinite wisdom and benevolence thought proper to do so, and we have not the facts, if we had the intellects, to enable us to sit in judgment on His works.

We now enter upon the revealed, or Adamic period, the creation recorded by Moses; in the commencement of which "the earth was without form and void; and darkness was upon the face of the deep; and the spirit of God moved upon the face of the waters." For this period we have the united testimony of geology and revelation for our instruction, mutually sustaining each other by incontrovertible evidence.

The preceding creation of mammalia was destroy-

ed when the earth became "without form and void," by the water which covered it. A new creation was to inhabit the globe, adapted to the new climate it would have when renovated; in regard to which the constitutions of most, if not all, of the mammalia of the previous period, were incompatible. Besides, a new creature was to be created, with entirely new powers and faculties, towards whom many of the animals of the new creation must necessarily bear a direct relation. A creature in the moral and intellectual image of the creator was to be His visible vicegerent over the organic creation of the world; and to fit him for his high destiny he was endowed with moral and intellectual powers in a degree far exceeding his instincts. Instinct had before been the chief, if not the only, guide of the movements of the highest order of animals; but in this new creature instinct was to be subordinate to moral and intellectual powers, depending, for their development, upon the voluntary exertions of the being, who was made responsible to the Creator for the manner in which he cultivated and employed them.

This new creation consisted of all the animals now in the world, and some which disappeared at the subsequent great epoch, the Noachian flood: such as the dinotherium, megatherium, palæotherium, mammoth, mastodon, megalonyx, &c., the remains of which are found in diluvium, together with the fossil remains of man and many animals now common.

The climate of the Adamic or ante-diluvian period

must have been tropical in all parts of the earth, because the organic remains of every part of the globe, found in diluvium of high and low latitudes, have tropical natures. It is evident, therefore, that during this period the earth had a more equal temperature, in all latitudes, than can be accounted for by solar heat alone; consequently as we know of no other cause adequate for such an effect, we must suppose the climate yet to have been influenced by internal heat. It is at least evident from the Mosaic history, as well as geology, that the deluge, terminating this period, was followed by an important physical change; because human life was immediately shortened more than one half, and was subsequently reduced still more. Noah was six hundred years old when the flood commenced, and lived three hundred and fifty years after it. Shem, his son, lived only six hundred years; and Arphaxad, Shem's son, only four hundred and thirty-three years. This appears to have been the duration of life for five generations immediately after the deluge, when it again suddenly diminished. This great change in the duration of life can only be rationally accounted for by a change of climate unfavorable to longevity. That the climate had changed appears also from the circumstance that prior to the deluge vegetables and animals do not appear to have been confined to zones; but in all the period since that event they had been so confined.

The Noachian deluge was the last great epoch in the physical condition of the earth, and was probably followed by less change than any of those that

preceded it. It was the only great epoch through which any of the terrestrial animals of the preceding creation were to live. No new creations were designed to succeed it, and consequently the future world was to be replenished from that which was destroyed. But a change of climate must take place, and all the herbivorous animals must of necessity be confined within a narrower range than they enjoyed prior to this event. The dinotherium, mastodon, mammoth, &c., if crowded in to the tropics, with the animals now inhabiting it, might have been too many for the supply of food, and were probably destroyed for this and other causes. Before the flood the range of herbivorous, and consequently of carnivorous animals was unlimited. Fossil remains of all of them are found in diluvium from the Arctic to the Equator; but similar animals are now only found in the Torrid Zone.

Before the flood we have no evidence that the human intellect had made any advance towards the perfection to which it has since arrived; but we do know "that every imagination of the thoughts of his heart was only evil continually," which is incompatible with knowledge and wisdom. Besides we have seen that the climate must have been universally tropical during the Adamic period, which, as we know from the whole history of mankind, is unfavorable for the full development of the morals as well as the intellect of the human species, and much more unfavorable for the latter than the former. No nation south of north latitude 30° has at any time equalled nations north of that latitude. It is some-

what a remarkable fact in the history of mankind, that the Shemitic race moved westward from Asia to Europe in their migrations, concentrating between the latitudes of 30° and 50° north; and with the exception of Great Britain, these latitudes embrace the great focus of civilization and of science of the world, increasing in intensity with its progress westward. It has not passed either to the north or south of these latitudes, excepting Great Britain; rather than which it has bounded over the Atlantic, and is progressing between the same parallels to the Pacific. Great Britain is, as we have said, the only exception to this fact; but her insular position gives her a climate embraced in lower latitudes on the Continent, so that she scarcely forms an exception. A tropical climate enervates the body and mind; and by making less exertion necessary to obtain the necessaries of life, the intellectual powers are not so frequently exercised, nor so powerfully stimulated. Although, therefore, the ante-diluvians were within these parallels, yet as the climate of the whole earth appears to have been tropical, they probably made little or no intellectual advances, while their morals were debased by their loose and idle habits. Thus we see that the Noachian deluge improved the climate of this globe, in a very high degree for the benefit of man. His life was shortened; but he lives longer now in his three score years and ten, by mental and physical capability, than did Methuselah in his forty-eight score years and nine.

We have already noticed that human life diminished, immediately after the flood, to less than

one half of the average duration of the Adamic period; and this continued for five generations, ending with Eber. Upon the birth of Peleg, which was at the time of the dispersion, upon the confusion of languages at Babel, it was again reduced about one half, or to two hundred and thirty-five years; at which it continued for three generations, to the birth of Nahor; when it was again reduced to about one hundred and fifty, on an average, including the patriarchs Terah, Abraham, Isaac, Jacob, down to Moses, who lived one hundred and twenty years. It subsequently diminished more gradually, until it reached three score years and ten, at which it has since remained. The change of climate, produced by the Noachian flood, was, therefore, gradually progressive, until it reached its maximum, where it has since remained. The constitution of the Adamic period, possessed by Noah and his sons, may also have contributed to their longevity for a few generations. If the change of climate had been sudden Noah and family must have died, unless their constitutions had undergone a miraculous change; but the lacustrine condition of the earth, immediately after the flood, bore a resemblance to the same condition of the earth during the Adamic period, and was therefore agreeable to the constitutions of Noah and family.

Since the Deluge, down to the present time, the earth has suffered no important change, either in form or organized beings. Local and partial changes have taken place; but no general change to stamp a character upon any particular period of time, to

mark it as distinct from any other. Earthquakes and volcanoes;—alluvial deposits in oceans and rivers;—deposits from springs and by icebergs,—are frequently, or continually in activity; but however enormous and terrific these may appear to those who are in the neighborhood of their occurrence, so far as it regards the general character and condition of the globe, and particularly as it regards general climate, they are of no account. That a gradual, but slight change of climate may take place, by reason of the diminution of the earth's eccentricity, is probable; but this diminution has been progressing for ages beyond the history of man, and therefore its operation cannot be applied to this, more than any other period. On the contrary, it was common to them all, and may be supposed to have produced greater effects in the earlier than the later period.

We have thus traced the history of our globe down to the commencement of human evidence in profane history, with sufficient accuracy to have a clear view of the progressive development of its inorganic and organic condition. We have marked six great epochs of changes, each of which must have been followed by corresponding climatic changes. Four of these occurred before, and two since the creation of man;—at least one ushered in the creation of Adam, and the other followed the introduction of Noah. If the constituents of the atmosphere were in all periods the same, which we have reason to believe was the case, the climate must have undergone great changes, corresponding with the observed

geological changes. During the Igneous period, particularly, an immense amount of oxygen must have united with the bases of the rocks which then composed the earth's crust. Chemists have proved that nearly all the rocks of the earth, and probably all of them, consist of bases united with oxygen. Calcium, potassium, silicium, magnesium, sodium, &c., are metalloids, which, when combined with oxygen, constitute lime, potash, silex, magnesia, &c. What an immense amount of oxygen must have combined with the bases of the earth, during the progress of refrigeration!! Carbonic acid gas must also have abounded during this early period, as forty-five pounds of this gas are necessary to make one hundred pounds of limestone, or the carbonate of lime. Nitrogen, another element of the atmosphere, also combines with several metalloids, and other gases, forming various compounds. With potassium it forms saltpetre, and with hydrogen, ammoniacal gas, &c.; but it forms fewer compounds than oxygen and carbonic acid gas. It appears, therefore, that these two gases must have prevailed in excess, not only during the whole of the ante-Adamic periods, but during the Adamic and the early Noachian periods; that they became fixed in greater quantities during the Igneous period than subsequently, and at each successive, more than at any subsequent period; and that, during the Zoophytic period, carbonic acid gas, in immense quantities, must have become fixed, not only in the limestones, but in the immense coal formations, of that period.

These are fair inferences from geological facts,

and chemical science. It appears that oxygen and carbonic acid gases must have prevailed in excess during the Igneous period; but whether they also prevailed in excess at any subsequent period is another question, and especially as it regards oxygen; for although the amount of oxygen appears to have been more than is now contained in our atmosphere, so may nitrogen have been proportionably abundant, and the same relative proportions may have been thus preserved.

But granting that the proportion of oxygen, during the whole of the Adamic, and the early Noachian periods, was greater than it is now, it does not follow that its influence on organic life must necessarily have been proportionably great; because we have seen that the climate was much hotter. Air is expanded by heat, and condensed by cold. An equal volume of air, therefore, differently heated, contains different quantities of oxygen. Besides as the antediluvian climate was influenced by internal, more than by solar heat, it must have been more moist, or contained more vapor. Consequently, as the human being inspires an equal volume of air, at every inspiration, he does not obtain an equal amount of oxygen, when the circumstances influencing the atmosphere are so very different.

We cannot dismiss this part of our subject without expressing our admiration of the infinite wisdom and benevolence of the Creator, so far as we can understand his laws and designs. That He made matter out of nothing excites less astonishment in the mind of the philosopher, than that He

should impress laws upon each atom which constitutes the great whole of creation, by which it is invariably and for ever compelled to carry out His designs. The philosopher is accustomed to look at great results produced by agencies, which, if not nullities, have no existence according to our ideas of being. Light, heat, and electricity, are only known to us by their effects. They have none of the properties which we ascribe to matter; and yet there is no known substance, however stubborn and unyielding, if a compound, capable of resisting their power. Nay, when we look upon our globe, with its atmospheric, inorganic, organic, and geological wonders, and know that the whole consists of a few gases, and almost gaseous metalloids, we arrive so near to nothing for its construction, that we should scarcely be surprised to find chemistry, in its manhood, arriving at a few simple gases for the whole material, as it has, in its infancy, discovered these, with a few solids. But the laws which the Creator impressed upon the elements of matter, which they are invariably compelled to obey, and by which His designs are fulfilled, fill the contemplative mind with wonder beyond expression. "How admirably simple does the chemistry of organic nature present itself to us from this point of view! An extraordinary variety of compound bodies produced with equal weights of two elements! and how wide their dissimilarity! The crystallized part of the oil of roses, the delicious fragrancy of which is so well known, a solid at ordinary temperatures, although readily volatile, is a compound body con-

taining exactly the same elements, and in the same proportion, as the gas we employ for lighting our streets; and, in short, the same elements, in the same relative quantities, are found, in a dozen other compounds, all differing essentially in their physical and chemical properties."—Liebig's Familiar Letters on Chemistry, Letter 5, p. 19, on Isomerism. This is not really producing something out of nothing; but it approaches so near to it that the mere law of arrangement of the particles of one substance offensive to our sense, is made to produce another substance agreeable to our sense, without the addition of any other substance, or the abstraction of any of its components. It is the production or creation of qualities or properties out of nothing, which sound philosophy, a few years since, would have thought quite as impossible as the atheist has ever believed to be the case with regard to matter. Did we say it was the production of qualities and properties out of nothing? It is the production of the law of Him, who, when "the earth was without form and void," "moved upon the face of the waters,"—whose command is as imperative upon inert matter as upon organized beings;—whose lone spirit said,—"let the dry land appear;"—and immediately the igneous mass beneath glowed and swelled with increased energy—lifted mountains and continents to their present elevations, and the water rushed down their sides into the ocean depths corresponding with the elevations of the dry land; while His spirit, unmoved by the convulsions which surrounded him, placidly and benignly surveyed the terrific scene, and "saw that it was good."

We have seen that each period, as it succeeded another, was an improvement not only in the physical constitution of our globe, but in its organisms. New creations were successively made, adapted to the new condition of things, in every instance but the last, or Noachian flood. It was not necessary in this last great revolution; because man was so made, "in the image of God," that he was susceptible of indefinite progressive improvement, without amendment of his organization, however much he afterwards needed it in his morals. Progressive improvement appears to be a constant and universal law of creation, applicable to all things, as well as the several animal creations. Man alone is so organized that he can fulfil the requirements of this law by his own energies. Let us see how he has performed the duty.

For obvious reasons we omit noticing his progressive improvement in his religious duties; and yet it is extremely difficult to trace his moral and intellectual improvements without including the discharge of his religious duties to his Creator. We may, however, as a general principle, assert, that the Shemitic species have reaped the reward of the promise, or blessing, pronounced on their progenitor—"blessed be the Lord God of Shem," and that it is chiefly through this instrumentality that they enjoy their high privileges. It has been the high prerogative, or rather privilege, of this race, in some one of its branches, or diffused through all its nations, almost exclusively to possess the full perfection of the religion, for the consummation of

which the Jews became the special favorites of the Almighty. Its influence upon these nations has been productive of so many benefits that we know not how to estimate them, without giving credit for the whole we enjoy, which might be more than is its due. And yet we could scarcely make it less; because why the white race exclusively was made capable of becoming the depositories of the Gospel, after its rejection by the Jews, cannot be accounted for but upon the belief that they were also blessed in their ancestor Shem, although not made the special chosen line of the Messiah. In view of this great event, by which the whole of the Shemitic species was to divide the inheritance before possessed by Israel exclusively, the white races, from the earliest periods, exhibit the elements of progressive improvement of morals and intellect, distinguished in a remarkable manner from the dark races. There is no white nation, however remote the scrutiny may be extended, in which there has been so absolute a despotism as has universally extended over the most favored dark races. On the contrary, some principle of democracy has pervaded them all, even the most tyrannical, by which the people possessed the power of recovering some proportion of their rights, when severely oppressed by despotism. The earliest traditions and records of the Greeks, and all of the Pelasgian settlements in Asia, Italy, &c., exhibit the right and power of the people to interfere in the government and their civil polity. The same, or probably more regular assemblages of wise men, to deliberate upon public affairs,

universally prevailed among the northern barbarous nations of Europe; especially the Germans, Danes, Swedes, and Norwegians. The almost universal prevalence of the feudal law, although arbitrary and tyrannical, was highly favorable to the people, compared with the hopeless condition of all the dark races, in whose despotisms all were slaves. In the feudal system the barons interfered between the king and the people; and the tenures were held by written contracts, or known laws, customs, and usages. It contained within it the elements of liberty, and protection from general despotism, although individual instances of gross outrages were perpetrated under it. This difference between the white and dark races has so invariably prevailed, from time immemorial, that we are forced to regard it as a natural inherent difference in the species,—as a natural difference in the distinct temperaments of the several species. It is alone sufficient to indicate the vast disparities in the destinies of the races; it alone is sufficient to account for the reason why the Shemitic races have exclusively and voluntarily become the depositories of a religion founded upon love and benevolence, instead of one founded upon violence, cruelty, and persecution. A certain degree of freedom is an essential element for the continually progressive improvement of the human intellect; and a necessary element, also, for the full accomplishment of any of the great moral purposes for the benefit of mankind, inculcated by a religion of love. A despotism may raise great and imperishable national

monuments of stone and mortar, curiously sculptured in hieroglyphics,—may commit any enormities of violence and desolation,—because it can command the aid of men who never had, and never thought of having personal rights in opposition to the despot's will; but it is reserved to a more free people to raise monuments of exquisite taste, to be the admiration of the world for their extreme delicacy and proportion, and whose very violences carry with them the softening influence of future improvement and cultivation. It would be utterly impossible for the government of the United States to construct temples and palaces to be compared with those in Mexico, built by the Aztecs and Toltecs, because the people would not submit to the drudgery and expense of such follies; but the government would be sustained by the people in the more noble enterprise of protecting a colony of blacks in Liberia, without the expectation of any other reward than the consciousness of doing good to the poor children of Africa.

Moral and intellectual progressive improvement, therefore, appears to be confined to that species of men, which, in their social organizations, have a certain degree of personal liberty secured to the mass of the people; to that species which has never yet quietly submitted to an absolute despotism, and to whose natures it appears to be wholly irreconcilable. In the whole history of mankind, progressive moral and intellectual improvement never appear to have developed among nations whose natural temperaments appear to be conge-

nial to despotism, except in some limited degree proportioned to the secured rights of the mass of the people, beyond which limit it does not pass.

The increased power of the human intellect to accomplish new labors, by the accomplishment of others preceding them, does not arise merely from the new materials acquired by such previous labors, to assist in accomplishing the next. The exercise of the mind increases its functional power. How this is effected we know not; whether by the enlargement of the whole mass of the brain; or by the enlargement of the particular organ exercised, as phrenologists contend; or by an increased sensibility of the whole nervous system; or by the combination of all of these in some degree, we cannot pretend to say. But all know that mental power is increased by exercise; and all know that every new material added to the general stock of knowledge also contributes an additional means to make another acquisition. But although this appears to be a universal truth when applied to the Shemitic species, who possess the strenuous temperament, it appears to be only true in a limited degree to the other species, who possess the passive, the callous, and the sluggish temperaments; and in the order they are named.

We do not design to delineate the developments of the faculties of the different races, and their varieties, which will be the province of the future naturalist to whose detailed history it will properly belong; but it is proper that we should take a rapid glance at one of the species, that we may have an

opportunity to explain distinctly what we mean. That we may do this more intelligibly we will select the Shemitic species as an example of them all.

The development of the human faculties, in their early infancy, appears to have been slow. Mankind appears, from sacred and profane history, in the very earliest period, to have had a particular degree of civilization, from which many of those who emigrated from the original centre of distribution receded; and beyond which none appeared much to extend the faculties of the mind, for ages after such distribution, although they retained what they had acquired. All history and ancient traditions agree that the centre of distribution was the banks of the Euphrates, in Asia, in the neighborhood of Babylon; and they are almost equally unanimous on the fact, that the early arts and sciences originally came from the same place. Apparently all the arts and sciences known to the Egyptians and Phenicians, in their highest state of civilization, were as perfectly known in Chaldea, long before the settlement of Egypt or Syria. The important discovery of the Champollions, by which the Egyptian hieroglyphics, or rather alphabets, are decyphered, and the calculations of artronomers to ascertain precisely the reigns of ancient monarchs by the Sothic or Cynic Cycle, have taken the Egyptian history out of fable, and given to it, in its important features, the certainty of record. The important fact is, therefore, at length settled, that the Egyptian chronology is not contradictory to, but confirmatory of, the sacred volume. If we

take the Septuagint chronology, instead of that adopted in our version of the Scriptures, which is taken from the Masoretic Hebrew copy, the date of the flood will be carried back about 750 years beyond the time mentioned in our Bibles; a period, we think, supported by a great variety of facts besides the ancient Samaritan copy of the Pentateuch. The early Christians all held to the Septuagint chronology, in their controversies with the Jews. It is foreign to our design to examine this matter, although we think proper to mention that, from the date of the flood to the call of Abraham, according to our copies of the Bible, is only a period of about 400 years—a period much too short for the populous nations at that time in being (Chaldeans, Syrians, Assyrians, Persians, Canaanites, and Egyptians), to have sprung up, even allowing to the patriarchs preceding Abraham an average life of 435 years. Whereas, if we follow the Septuagint, the period from the flood to the call of Abraham is about 1200 years; which would afford time for the human family to have increased conformably to the state of things found by Abraham in Canaan and Egypt. Anterior to the settlement of Egypt, Babylon and Nineveh were built; the accounts of which, in the earliest histories, corroborated by the ruins on their sites, exhibit a state of the arts and sciences, not surpassed by the Egyptians, by their most elaborate works, in their palmiest days. In no important particular, so far as we can discover, did any one of the great nations of remote antiquity excel another. It is one proof, among many others more direct, that Chaldea disseminated arts

and sciences, as well as supplied the settlers of the ancient world; that Phrygia, Syria, and Egypt on the west, and China and India on the east and south, each contended with Chaldea, and claimed to be the most ancient people, and the earliest civilized. If the advance made by each of these ancient nations in astronomy should be made a test of intellectual refinement and civilization, we think it will be found that Chaldea was not only more ancient, but more advanced. None of these ancient nations are entitled to very high praise for precision, or extent of knowledge in this science; but the records of eclipses were more perfect, and for a longer period, in Chaldea, than elsewhere. Alexander the Great, upon the conquest of Babylon, found records of eclipses for more than 1900 years preceding. Rough they were; but in the hands of Halley they were turned to good account. Ptolemy, the Greco-Egyptian, was obliged to resort to Chaldea for astronomical information.

From the earliest period of profane history some nations of mankind had a certain degree of civilization, the relics of which now strike us with astonishment, because we, applying our principles of science for their explanation, give to them an advance in intellectual power they never possessed. Modern examples of the same kind of civilization may be found in the Aztecs of Mexico, and the ancient inhabitants of Peru; and yet no one thinks of investing these people with a knowledge of the arts and sciences, to the same extent that is usually bestowed upon the eastern ancients.

Sacred history extends far beyond profane; and yet in no instance does it present man to us without these elements of civilization. Abel was a keeper of sheep, and Cain a tiller of the ground. And immediately after Cain had been driven out a wanderer and vagabond, he built a city which he called Enoch; and his immediate descendants, some were handlers of the harp and organ; and others, artificers in iron and brass. The state of the arts must have been considerable to have enabled Noah to construct the ark, after the direction he had received from the Almighty. Immediately after the flood Noah planted a vineyard, and became a husbandman; and soon after this we discover his descendants building the huge tower of Babel.

Thus, we see, whatever authority we pursue,—ancient tradition,—profane or sacred history, they all lead us to the same fact,—that the earliest known condition of part, or the whole of the human family, was a degree of civilization, constituting at least the elements of useful knowledge, and the foundation of the future development which man was to make, by his own energies. Assuming Babylon as the centre of distribution (it was at least from that neighborhood) we discover it radiating out in streams, in all directions, about at the same time, modified by the peculiar circumstances of each country in which the emigrants settled, and the constitutional temperaments of the individuals composing each colony. Thus we find Egypt, Canaan, and Phenicia, or rather Syria, settled on the west and north west; Assyria and Persia on the north and east; and even India,

which appears to have been settled about the same period. It is probable, also, that China was settled about the same time, judging from their own histories; but as they were not certainly known as a nation earlier than the first of the Christian era, we omit them. All of these nations appear to have possessed about the same degree of civilization, as evidenced by the arts and sciences, which they must have carried with them from the original stock, at the time of their departure. Some of them slightly improved; others remained stationary, and others retrograded; but there was certainly no very decided mental improvement, from what was originally in Chaldea, until it became engrafted upon the Pelasgians of Asia Minor, and the same people in Greece. These Pelasgians were, as we have already said, probably a branch of the Shemites who emigrated north by a branch of the Euphrates into Syria, and settled the east coast of the Mediterranean, north of the Canaanites. We have also heretofore mentioned that the children of Ham, except the descendants of Canaan, were not obnoxious to any curse, nor the partakers of any special blessing; and therefore it may be presumed that they became united with the children of Shem in their migrations, until Abraham was called upon to separate himself, for the purpose of being the progenitor of the Israelites. If so, then there was no difference between the Phenicians or Syrians, and the Pelasgians and the Egyptians, as it regards their species. That all of these people were of the white species is not only clear from the weight of historic evidence, but also from

the circumstance that colonies from Egypt and Phenicia settled in Greece and combined with the original Pelasgian stock, without any deterioration. It became also, by the conquest of Alexander, a Greek province, and one of the Ptolemies married a Syrian lady, Cleopatra, from whom descended the celebrated beauty, whose charms conquered the conqueror of the world; an evidence that at least some of the Syrians were of the white species. This will account for the high encomiums passed upon the skulls of Egyptian mummies by Blumenbach, Lawrence, and others, on account of their great beauty, and European character.

We have said that there was no decided mental improvement, probably from the flood, until the arts and sciences then prevalent became engrafted on the Pelasgians of Asia Minor and Greece. These Pelasgians must have lost the knowledge common to their brethren, by their separate migrations, and by not locating in large bodies in towns and cities, as had been done by the Syrians and Egyptians; but they acquired something by their roving which the others had not. In the first place, they became the inhabitants of a more temperate, and therefore a more congenial climate for intellectual and physical development; and in the second place, they lost that patriarchal influence in their social regulations, which universally ended in despotism in Asia and Africa, except in respect to the Jews. All their institutions were democratic, even their kings being elective; or, if hereditary, it was by the implied assent of the people, which sometimes they revoked;

as happened with Gelanor, king of Argos, who was dethroned by an assembly of the people to make room for the elevation of the Egyptian Danaus. These circumstances more than compensated them for the temporary loss of the arts and sciences; because they bestowed upon them a vigor, a sprightliness, and an elasticity of character, in which the Asiatics and Egyptians were deficient. These qualities manifested themselves in their early poetry, in which they far excelled all the ancients, except the inspired authors of the Israelites. The Egyptians, and others, were erecting buildings of stone and bitumen to perpetuate the fame of their kings, which have endured the influence of the elements for ages, while the Greeks were laying the foundations for mental structures infinitely more durable and admirable, both in their institutions and poetry. It is probable that a part of Greece had acquired a knowledge of letters through Asia Minor, by Thamyris the Thracian, and Olen the Lycian, or their predecessors. It is certain that these poets were known and esteemed before the siege of Troy: but Cadmus, a Phenician, is said to have introduced sixteen letters of the alphabet about 1520 years before our era, to which eight letters were added by the Greeks. But however, or from whomsoever, the Greeks acquired their rudiments of knowledge, they soon converted the elements thus obtained into new materials, which, in taste, elegance, and utility, far exceeded the raw materials they obtained. If in the arts and sciences they had frequent recourse to Egypt, Syria, and Chaldea, they never became copyists, but always embel-

lishers. The architecture and sculpture of the Greeks bear no comparison to the huge size of many of those of Egypt; but in taste, and elegance of design and execution, they far excel them. The degrading and horrible religion of Egypt and Syria became, in their hands, powerful instruments of poetic machinery, and incentives to noble and patriotic sentiments and conduct. The Greek and Roman Mythology was, probably, a necessary preparation for the diffusion of Christianity. It is certain that Socrates, Plato, and their disciples, were led to a belief of the immortality of the soul, and the eternal existence of a Supreme Being, without the assistance of Revelation. In Athens an altar was raised to this "*unknown God;*" which St. Paul seeing, in his address to the inhabitants said, "whom therefore ye ignorantly worship, him declare I unto you." In Egypt, and all of Asia, in which a similar mythology prevailed, somewhat varied, but alike in degrading influences, Christianity has never been able to make a firm lodgment. In Arabia, Syria, and Asia Minor, for a short time after the Apostolic period, it appeared to thrive; but it soon became so corrupt that Mohammedanism found less opposition from Christians than from pagan idolaters, because Christianity was opposed to the sensual appetites of the people. But the institutions, the religion, and the genius of the Greeks, were favorable to the development of morals and intellect. In almost every department of the arts and sciences they made great improvements, or laid foundations for future improvements; and in some,

as architecture, sculpture, and belles-lettres, they have left models which never have been excelled.

The Romans were as stately and grave, as the Greeks were gay and lively ; as if it had been so ordered by the Disposer of human events, that they should arise when the Greeks were fully ripe, that the improvements of these ingenious and intellectual people should be stereotyped upon more durable materials, for the benefit of the world. They added little to the value of the stock they received from the Greeks ; but they stamped it with their own stately and dignified character, and gave it currency for the benefit of all future generations. Their conquests, unlike those of the nations of Asia, which left desolation and ruin behind them, made some amends for the violences they committed, by the knowledge they engrafted upon the nations they conquered. In view of the vast inundations of barbarians who were soon to flood Europe, no deposit of human knowledge could have been as safely made as with the Romans. Their arms soon prevailed over the whole of Southern Europe, Egypt, and Western Asia ; and they made every colony a participator in the custody of the treasure, as if they had been conscious of the wide-spread desolation preparing for them. That Egypt and Western Asia have not improved by the deposits, must be attributed to the Ishmaelites who became masters of these regions, and whose temperaments were not suited to high moral and intellectual attainments. The burning of the Alexandrian library by the Saracens, was in keeping with the Ishmaelitic intellectual character.

The division of the Roman Empire, into the eastern and western, was also favorable for the preservation of knowledge; because the eastern empire was not finally subverted until nearly one thousand years after the western; before which the barbarians of the west were, in some measure, prepared for the reception of those learned Greeks, who, on the fall of the empire, spread themselves over every part of Europe. The western empire was overturned by the same species of men they conquered. All the nations of Europe were of the Shemitic species; and, consequently, although they were barbarians, they soon united with the civilized inhabitants that remained, and formed a homogeneous mass. The eastern empire, on the contrary, was overcome by Ishmaelites, a species distinct from the inhabitants; and to this day the line of separation is as distinct as on the day of their conquest.

The dark age is generally said to have commenced with the overturning of the Western Roman Empire; but it commenced centuries before, with the commencement of the empire. The world was descending to barbarism under the Emperors as rapidly as it was possible; and had it not been for the Germans, it is highly probable, that, at this time, instead of the high state of civilization we now enjoy, the whole of Europe would be sunk in the depths of ignorance and superstition which now engulf Asia. The destruction of the western empire saved the Shemitic species, and has enabled them thus far to fulfil their appointed destiny. The gloom which overspread Europe for a thousand years after their irrup-

tions, was nothing to the palsy which would probably have prevailed, if the empire had been permitted to sink, by its own crimes, to the moral and intellectual perdition to which it was hastening. If it had remained as long as the eastern empire, the whole Shemitic species would probably have been swallowed up by the Ishmaelites, as the eastern empire has since been; and the Christian religion and science would have been extinguished, never to have been rekindled. The irruptions of the Germans were, therefore, necessary to save Europe from slavery to the Ishmaelites, or the worse perdition of the moral pestilence of the crimes of the Empire. They were necessary tempests to purify the moral and intellectual atmosphere; and the deep darkness which succeeded their tremendous violences, was a necessary period for the elements of the storm to settle in the horizon, or disperse by the power of the sun, when he should again rise in the firmament. The seed for a glorious harvest was preserved by the preservation of the Shemitic species. Some time was necessary for the preparation of the new soil in which it was destined to grow; but when it was prepared, it was a virgin soil, of the best quality, free from the noxious weeds of the old soil, and ready to bestow its whole energies to the development of plants congenial to the highest perfection of the human species. The exuberant fertility of the soil began to be exhibited before the reapers were ready for the harvest. Roger Bacon bore fruit abundantly early in the thirteenth century. His "Opus Majus" was truly a great work for the age in which he lived.

He was a profound mathematician, chemist, and natural philosopher. He discovered an error in the calendar, which was adopted by Gregory XIII. The air-pump, the laws of optics, and the power of glasses, were also discovered by him; and he added to the list gunpowder, of which he was the inventor. In short, he anticipated the proper age for such discoveries, was accused of magic, and was imprisoned. He was followed by Dante, Petrarch, Boccace, and Wickliffe, who in the fourteenth century were precursors of the splendid achievements of the fifteenth century. This latter period was more brilliant than any since the advent of our Saviour; for it was now that Columbus gave to the old world a new world, capable of sustaining a population as great as all the old world then known;—a region, as it were, fresh from the hand of the Creator, and destined for the development of the human faculties in the highest degree. Raphael, M. Angelo, Erasmus, Copernicus, Camoens, Tasso, and Spenser shed a brilliant light upon the age. As if the discovery of the new Continent required the correction of old errors, Luther and Calvin became the living instruments for perfecting the design of Wickliffe; and from this reformation we may date the irresistibly progressive improvement of morals and intellect. It was followed by Tycho Brahe, Cervantes, Lord Bacon, Galileo, Kepler, Raleigh, Shakspeare, Grotius, Descartes, Pascal, Milton, Boyle, Dryden, Locke, and Leibnitz. Brilliant as all of these are, Bacon outshines the united splendor of the rest,

and will for ever remain the sun around which human intellect will revolve.

These were immediately followed by a host of the most splendid men the world had ever seen. First in the list, though not first in time, we name George Washington, the founder of a nation in which the civil and religious liberty of man is acknowledged, and in which every citizen is an integral part of the government. But when we name along with him Newton, Pope, Linneus, Rousseau, Pitt, Euler, Franklin, Johnson, Lavoisier, Herschell, Davy, and hosts of others who might with equal propriety be named, we have done enough to show that the march of intellect is still progressing with mighty and rapid strides.

It is not within our prescribed limits to notice the various improvements of modern times, as compared with any ancient period; but we cannot omit noticing three which have changed the whole condition of man, and have given to him a power infinitely beyond what he at any former time possessed. We allude to the mariner's compass, the art of printing, and the application of steam-power to navigation and other purposes.

The power of magnetic attraction was known to the Greeks, Chinese, and probably all the ancients; but the polarity of the magnet was not known until about the commencement of the thirteenth century of our era. It was immediately applied to navigation, at first rudely, by placing the magnetic needle upon a floating straw; but in the commencement of the fourteenth century, it was improved by Giaio,

of Naples, by placing it on a permanent pivot, with a circular card. It was some time after this before it inspired sufficient confidence to be implicitly trusted; and it was not until the middle of the sixteenth century that it reached its present perfection. Imperfect as it was, it enabled Columbus to discover the new world, and Vasques de Gama to reach India by the way of the Cape of Good Hope. Before the invention of the compass, navigation was necessarily confined to the shore, in small vessels, suited to the shoals of such a navigation; but now it claimed dominion over the trackless ocean. The small vessels which were before only suited to the mariner, now became useless, and ship-building on an enlarged scale became necessary. Such has been the influence of this highly important discovery upon the progressive improvement of man, that we scarcely know how to estimate it. Its first fruit was to relieve the Shemitic family from dependence upon the Ishmaelites; for these had obtained possession of the Mediterranean and Red Seas, and thus made trade to the East Indies tributary to their exactions. The commerce of the world thus became revolutionized, and the great Shemitic family, relieved from the fetters which bound them to the Ishmaelites, speedily exhibited the peculiar temperament which distinctively belongs to them as a species. A new element of society now sprang up, by commerce, which was enabled to check the power of kings, and control the power of the feudal barons. The sinews of war, the purse strings, were transferred from kings and barons to the people; and

although the struggle has been hard, and long maintained, between the mass of the people and the aristocracy, yet have the people been constantly gaining in strength and power, until now, when one large and fair quarter of the globe is exclusively governed by popular opinion, and the most absolute monarchy of Europe is no longer subject to the mere will of a despot. When we look at the apparently insignificant discovery, which, in its results, changed the whole Shemitic family into one vast democracy, we are struck with astonishment at the simple means adopted by the Creator to accomplish the most important purposes. The sword and the gun are instruments of power for despots to enslave mankind; but the polarity of the needle, and the art of printing, are instruments of power in the hands of the people, compared with which the sword and the gun are but feeble rushes.

As if to compensate mankind for the long suspension of the progress of the human intellect, while it was undergoing a purification and renovation from old crimes and customs, the art of printing was discovered about the middle of the fifteenth century, as an instrument of power in the hands of the people, to hold in check the discovery of gunpowder, an instrument of power in the hands of their rulers. Before this grand discovery, the bulk of mankind were excluded from any great improvement in morals and intellect, by their own efforts. They were entirely dependant upon princes, who patronized or silenced learned men, as best suited their interests. Orators and poets were the only

publishers of information; and it was easy to silence them, or make them subservient to power. Books, for the mass of the people, were entirely out of the question. The discovery of the polarity of the magnetic needle, and its first fruit, the discovery of a new world, required the discovery of printing, that a new world of intellect should be discovered among the mass of the people, to correspond with the importance of the other new acquisitions. It was accomplished; and its first fruit was—The Reformation—a discovery of the pure doctrine of the Gospel, and the mind and morals of man began to expand fully equal to the importance of the new territories acquired. Wickliffe had commenced the reformation nearly a century and a half before; but, in the providence of God, he was cut off before he had endangered the sacred cause, by bringing it to maturity before the fulness of time,—before a previous state of necessary preparation. That time arrived with the art of printing; and the foundations of civil liberty were firmly built upon the solid materials of religious freedom. The new world was admirably adapted for the construction of a temple with these materials. The Puritans were soon engaged in laying its foundations; upon which a temple was afterwards finished, containing thirteen spacious apartments, exclusively occupied by freemen.

The next great instrument for the improvement of man was the discovery and application of steam power;—the importance of which, for all the purposes to which it is applied, is second to none within the range of human ingenuity. The two former

preceded it; but it came to crown them with a perfection they could never otherwise attain. The arts of printing and navigation were the great instruments of intellectual power in the hands of the people; but they required an equally effective instrument of physical power, to spare human labor, that they might reap the great harvest the press could so successfully cultivate. This physical power was found in Steam;—a power which has made human slavery a useless expense, and will, we hope, ultimately, procure the liberty of the most enslaved of mankind. This is exclusively an Anglo-Saxon invention; conceived by the English, and perfected in its highest property by the Americans. It is impossible to enumerate its value to mankind, without enumerating the various subjects of human employment; for it performs the drudgery of them all with unceasing efforts, and unabated energy. By it we are enabled to penetrate the bowels of the earth, and draw forth the mineral treasures it contains. By it we can travel on land, on rivers, and on oceans, with a speed and a certainty which can fix the hour of arrival at the most distant places, which is generally fulfilled. It cards our wool, spins our yarn, weaves our cloth, finishes it, and carries it to market for sale. It prints our books, and throws intellectual treasures from the press so rapidly and cheaply, that the whole world may be supplied at a rate within the means of every individual to obtain. It is the great humanizer of mankind, by binding nations together by stronger ties than, before its discovery, the parts of each nation were bound as a whole. It has

made great standing armies unnecessary for the protection of a nation, and thus deprived rulers of an instrument of despotism.

Thus we see that these three important discoveries, following each other successively, as their agencies have been required, extended the moral and intellectual empire,—accomplished its liberty,—and secured it in its possessions,—by a power unassailable by man. This empire of Morals and Intellect has succeeded to the universal tyranny of Rome, after a dark interregnum of a thousand years; but, unlike Rome, it has nothing to fear from Goths, Vandals, Huns, nor Mohammedans. No dark age can succeed this, our brilliant era, except by the direct agency of Him who controls all things; but it must go on conquering and to conquer, until every species of man shall have been brought to the highest degree of perfection of which the nature of each is susceptible.

We have thus traced the progressive improvement of the world, from the earliest geological revealed and profane histories, and have observed it constantly to increase with each successive change. It is very remarkable that each change of organisms prior to the creation of man; and each change of mental and moral capability, after his creation, a flood of water, or a flood of barbarians preceded the renovation of organisms, and the moral and intellectual faculties. When a change was designed to be made in the species of organisms, a flood overwhelmed all the previous creations which were incompatible with the contemplated new climate, and

new species. This is particularly noticeable in the change from the Saurian to the Mammalian period, and from this last to the Adamic period; and again, though less generally, from this to the Noachian period. The birth of our Savior produced a new era in the world. The social regulations then prevailing were not suitable for his peaceful and intellectual doctrines. Rome was the whole world, and corruption flowed from her in mighty streams, producing a wasting pestilence in every region. A flood of moral and intellectual darkness was necessary to obliterate the mythology, which, however beautiful as poetic machinery, had, in its social influence, produced crimes in all ages, but had only arrived at the height of corruption under the emperors. It came; and buried the crimes and the mythology of the ancients, together with some knowledge which might now be useful, if it had been preserved. But it fully compensated mankind for any loss it occasioned, effacing old institutions, which had grown venerable from antiquity, and had become endeared to the people by their literature and their victories; all of which are directly opposed to the plain, humble, and peaceful doctrines of the gospel.

In perfect harmony with the progressive improvement of the inorganic and organic creation, is the constitutional capability, in man, for moral and intellectual improvement. We have heretofore said that this capability increases, not only by the accumulation of new materials, as instruments of power, but also by the development of the faculties, by which the capability of the mind for the discovery

of truth is increased. History is full of examples of men of genius having lived before their time; that is, having lived at a time when the capability of the human mind was not adequate to comprehend the extent of their discoveries, or to appreciate their genius. Pythagoras lived before his time, when he guessed the true solar system, which Copernicus afterwards established. Socrates lived before his time, and was murdered for his wisdom and virtue. We might easily multiply examples of men who lived in advance of the age they adorned, and whose wisdom and virtues were not appreciated, until, in the progress of time, the human intellect had improved to understand them.

If the Creator designed man for progressive moral and intellectual improvement, he must have constituted his faculties in such a way as to be susceptible of an increased moral and mental functional power. Without such increased capability it is impossible that he should advance. The same materials for knowledge were scattered over the globe, during the darkest periods of the human intellect, by means of which the men of the present day have raised those splendid sciences, and made those discoveries which adorn and secure the liberties of mankind. Apples fell from trees before one fell on a Newton; and boiling water generated steam before the Marquis of Worcester invented the engine, and Bolton and Watt applied it to a useful purpose.

All the elements of knowledge are the same now, that they were thousands of years ago; but the difference lies in the capability of the mind to use

them. The mere possession of materials for the improvement of the human mind, does not give the capability of using them, any more than the possession of a block of marble, and necessary tools, furnish the science and skill to fashion a Venus. The materials for indefinite improvement have been, are, and will be, always present; and when the intellect has arrived at a capability of using them, they will be found in sufficient abundance to carry the useful arts and sciences infinitely beyond their present limits. Who can foretell the utmost bounds of man's perfection in knowledge and wisdom, as destined by the Creator, by the two-fold action and reaction of the progressive improvement of man in mental and moral capability, and the accumulated experience and knowledge of preceding ages? The effective power of these two causes must be equivalent to each other; or the one must fall back to its natural position in relation to the other. If the experience and knowledge of a preceding age should be in advance of the capability of a succeeding one, they pass for nothing, until the capability shall be acquired to use them.

We are told, by the highest authority, that children inherit the qualities of parents; and experience teaches the same fact. Propensities, and moral and mental qualities, are transmitted with as much certainty as the form of the body. Many individual examples may be given in which this law does not appear to prevail. It often happens that intellectual and moral parents have stupid and depraved children; but such exceptions may be, in most cases,

traced to causes in the parents, arising from want of judgment in matrimonial connexions, or in the government of a family. This we will endeavor to explain hereafter; but allowing them to be exceptions, yet it is a general rule, taking the whole mass of mankind, that children inherit the mental and moral qualities of the parents. This general rule is sufficient to give to the mass of society a progressive increase, or diminution, of moral and intellectual capability, according to the condition of such society.

The difference, in this respect, is very remarkable when we compare the different species of men one with another; or, rather, we should say, that the operation of this law becomes strikingly manifest upon comparing the different species. The Ishmaelites of Asia were, at one time, nearer to the influence of the Gospel, and to the influence of Grecian taste and genius, than were the Germans; and had also the advantage of them in the sciences and arts of the times. But their "hand was against every man, and every man's hand against them;" and the predominance of this natural propensity has prevented them from being benefited by either. Many efforts have been made with their descendants, in this country, to improve their condition, with very limited success. Numbers of their children have been, when young, brought to our schools and colleges, in the hope that, by educating them, they would be efficient instruments for the improvement of their people. Such hopes have never been realized. If, by close watching, they could be prevented from escaping to their woods,

until they had passed through their destined course of instruction, they bounded away to their forests, and were seldom heard of afterwards. That a few of the Creeks, Seminoles, and Six Nations have become exceptions to these remarks, from the force of peculiar circumstances, does not weaken our general remarks.

The Canaanites have been among us for centuries, and in many places enjoy equal opportunities for mental instruction as white children, without exhibiting an equal mental development. The Friends of Philadelphia, whose philanthropic virtues are proverbial, have never been able to raise the moral and mental standard of the Negroes of that city above what it is anywhere in the South.

The Japhethites, satisfied that they know enough, and more than the rest of mankind, exclude the rest of the world from intercourse with them, that they may enjoy their celestial treasures exclusively.

If the Shemitic family were to labor as indefatigably to introduce among any, or all of these species, a knowledge of their arts and sciences, as they have of their religion, they would meet with about the same success. The mental capability of these species is incapable of receiving such improvement. Their conditions must be improved gradually, or not at all; and progressive improvement in morals, in the arts, and sciences, must be preceded by improved mental functional power. Any attempt to anticipate the mental capability must fail, because the faculties cannot comprehend what is beyond their reach. Children inherit the qualities of their parents; and,

if so, however young the children may be taken, the improvement must be slow, and extended through many generations, before a competent mental ability shall become established, from which a permanent improvement may be reasonably expected.

In reviewing the subject we are immediately struck with the very marked resemblance between the successive series of creations of the ante-Adamic periods, and the series of mental developments subsequent to the creation of man; as if each of these developments had a type in the previous organic periods. The analogue of the Adamic period is the Zoophytic period, when the absolutely necessary elements for future improvement were stored up; not by the accumulations of experience, nor by instinct as with the Zoophytes, but most probably by the direct communication of the Almighty to man. In no other way could Cain become a tiller of the soil nor Abel a keeper of sheep. In no other way could Cain have built the city of Enoch, and his descendants become workers in brass and iron. The knowledge of these necessary elements of civilization must have been communicated by the Almighty, or they were the result of instinct; for there was no time for experience to have perfected the arts sufficiently to have discovered them. From what we know of savage life it is impossible to believe that any series of ages will make men tillers of the soil, keepers of sheep, builders of cities, and workers in brass and iron, after a knowledge of these arts has been lost by them: much less can we imagine that the very short period intervening between the expul-

sion of Adam, and the knowledge of these arts, when the world teemed with the necessaries of life in proportion to the inhabitants, should afford sufficient time, or present sufficient necessity for this perfection of the arts. We also know that this knowledge was not derived from instinct; if it was, then all mankind must be endowed with a similar instinct, and we should find all savages in possession of them. Nay every man in society should be a builder, a blacksmith, a smelter, a forger, a miner, a compounder of metals, and a brazier, by a similar instinct that the bee is a collector of nectar and pollen, and an elaborator of honey and wax; by a similar instinct that the zoophyte builds his coral structure. We know this not to be true; and are therefore of necessity compelled to believe, that these necessary elements of civilization were communicated by the Almighty to the first inhabitants of the earth. Thus, then, the Zoophytic is the analogue of the Adamic period; and equally typical is the Saurian period of the period from Noah to the subversion of the Roman Empire. It was then, like their great analogues, that war and devastation were the chief glories and occupations of men. The infatuation of universal empire was the ruling passion, from Nimrod to the last of the Emperors; which was not finally subdued until after the overthrow of the Moors by Charles Martel. During this long period of strife and desolation, the Chaldeans, Israelites, and Egyptians, were the chief preservers, and the Greeks and Romans the great embellishers and promoters of civilization and improvement.

The ante-Adamic Mammalian period is typical of the remainder of the historic period, up to the time of Lord Bacon; during which the elements of moral and mental civilization were collecting, and arranging, for the final crown of the whole previous history, by the enthronement of nature instead of hypothesis, and by the establishment of the rights of the people, instead of the government of despotic force—just as the creation of man followed the Mammalian period.

And now mankind are hastening through a period, the type of which is the Adamic period; which we have entered upon for the comparatively short time of about two centuries; and have already accomplished more for the improvement of morals and intellect, and for securing the rights and civilization of man, than was accomplished during all of the preceding periods. Who can imagine the discoveries and improvements yet to be made during this period? Who imagine the state of improvement and civilization which must be reached by all the human species, before the arrival of that period "when the earth shall be full of the knowledge of the Lord, as the waters cover the sea?"

The arduous task of preparing for this great and happy event, appears to devolve upon the instrumentality of the Shemitic species. If left to their own unaided exertions the other species will probably remain as they have hitherto continued. We have no reason to hope for much improvement of any of the dark races, without the active exertions of the Shemites, directed in proper channels, in harmo-

ny with their natures and conditions. Can we fulfil this task without fully understanding all the particulars necessary for its accomplishment? Can we, by any avowals of relationship, of brotherhood, and unity of species, change the natures and conditions of men, and elevate them to our condition? Or should we not study their natures, and apply the proper remedies gradually, regularly, and progressively, precisely in the manner we have been brought to our present conditions? We are evidently destined for the accomplishment of this task. The Turks of Europe and Asia Minor will, probably at no distant day, be driven back to their homes in Central Asia, with such improvements as they have derived by their residence among us. Siberia, China, and India,—Asia is already surrounded and pressed on every side by European influence;—and what is not accomplished by the philanthropy, must be finished by the cupidity of our species.

Africa, too, poor, degraded, and wretched,—almost too low to excite our cupidity or ambition,—is nevertheless being surrounded by Shemitic influence, by the operation of various causes. It is not the occupation of her northern and southern extremities by European colonists, from which we expect the greatest benefits to her sable inhabitants; but from the colonies of her own children, in the Tropics, whose example can scarcely fail to produce an effect upon the wretched inhabitants of the interior.

In this broadcast husbandry of the seed of civilization Oceanica is not forgotten. The Shemites are but instruments in the hands of Him, who, at

the proper time, will quicken the understandings, and excite the desires of those who have for so many ages been slumbering or torpid.

The world of mind is, apparently, on the eve of a new acquisition of new elements. What effect they will produce upon progress, upon development of intellectual power, upon civilization, and the destiny of man, may be seen before many centuries shall have passed. We may hasten, but cannot retard its accomplishment; for "the progressive improvement of man, by increased moral and mental faculties, is a law applicable to human nature, notwithstanding the stationary condition of some, and the retrograde condition of another species."

CHAPTER VI.

THE EFFECT OF CLIMATE, MODE OF LIVING, &c., TO PRODUCE ORGANIC AND FUNCTIONAL DIFFERENCES IN MAN.

That in our matter of fact day so many ingenious and learned men should attribute such powerful effects to the operations of climate, food, mode of living, and other external causes, as to produce all of the varieties known in the human family, is surprising: more particularly as, from our knowledge of the various nations of the globe, all the known facts are decidedly against any such theory. We can only account for such, as it were, wilful blindness, and such a perverse disregard of the inductive method of philosophizing, on the supposition that they believe the subject to be settled by revelation, in its result; and that, however contrary to it the facts may appear, they must be made to conform to it in their conclusions. It did not occur to these gentlemen that they might do more injury than good by forced conclusions;—that it could happen that they might be mistaken in their construction of God's word, as well as in His works. A mind wholly unbiassed in favor of any particular theory, in reviewing the whole subject in connexion with the facts relating to it, is at a loss to see how these facts should be so long overlooked, or disregarded; and is still

more at a loss to discover how it was possible for learned and good men to believe, that the Revelation of the Infallible Creator should be endangered by such researches. Infidels, it is true, will have their flings at religion, upon every opportunity; but, unless good men oppose them on false grounds, and thereby place religion in a position the All-Wise Creator did not design, and by so doing, give its enemies an advantage, their triumphs will be so short that time will only be afforded to exhibit their own impotent malice. It is surprising how directly science has corroborated religion, in many particulars, after it has become sufficiently developed to assume a position on a firm basis.

God, himself, made four distinct species of men soon after the flood; the Shemitic, the Japhethic, the Ishmaelitic, and the Canaanitic,—why, then, should we say that because we had a common father in Adam,—in Noah,—that we must, therefore, be of one species? We had all different fathers, different spiritually, at least, if not organically, in Shem, Japheth, Canaan, and Ishmael, if the word of God had the same powerful energy to modify, as to create. The prediction concerning Esau and Jacob, that they were to be two nations, was literally fulfilled. Jacob was of the Shemitic species, and a patriarch of the Jews; but Esau amalgamated with and was lost among the Canaanites, who were of the black nation, or species. He settled south of the Dead Sea, in what was called Asiatic Ethiopia; and it might well be made a question if the Abyssinian negroes, the Malays, &c.,—the negroes with long

hair and peculiar features, had not their origin from him; and consequently whether there should not be a fifth distinct species. We leave this question open, but think it likely that further investigation will establish an Esauitic species.

We forget, however, that our present object is to examine the influence of climate, food, &c., to produce organic and functional effects upon the human frame. Here again have the advocates of the unity of the human species drawn their inferences from analogy. Without attending to the facts which so strongly mark the difference between the two classes of beings, it has been inferred that because domestic animals do change in color, and slightly in structure, by the operation of these causes, therefore man must also change. The one is a fact known to us by a constant occurrence; and the other is contrary to all known facts, and has no support but arguments from analogy. We have already treated so largely of the general impropriety of inferences from supposed analogies between man and animal, that we think it unnecessary to do more, at present, than to point out one important difference which is incompatible with any analogy between them, in respect to the subject under consideration. The wonderful pliability of the human constitution, to adapt itself to all climates, is so very different from that of animals, that the obvious and speedy changes in the latter, by change of climate, &c., are not matters of surprise, but always expected; while a like change of man, under the same circumstances, having

never been known to take place, would be a matter of surprise, because it is not expected.

In our remarks upon the distribution of vegetables and animals, we have endeavored to show that these organisms were not constitutionally fitted to inhabit different climates, even under the same parallels of latitude, or under isothermal latitudes; and, consequently, we find, in the five great divisions of the earth, vegetables and animals of entirely different genera and species from each other. We inferred, from these facts, that there must have been as many different centres of creation and distribution, as there are distinct habitats of vegetables and animals. We have also endeavored to show that, in these respects, there is no analogy between inferior organisms and man; for that all of the species of man are found in Asia, and its vicinity; and that the constitutional elasticity or pliability of man was admirably adapted to migrations to all climates, which was not the case with the other organic kingdom. There is, therefore, no analogy between men and animals in the constitutional ability to resist climatic impressions.

Domestic animals are constantly relied upon as the analogues of man in this, as well as all other respects, by the advocates for the unity of the species. As analogues they should migrate to the respective regions voluntarily, and provide their own food and comforts. No instance of the kind has ever been known. Of the very few wild animals which have an indefinite range, the fox for instance, we think it highly probable that, upon a close

investigation, it will be found that the limits of particular species are more circumscribed than is generally believed. But these widely-spread animals are not those which are selected for analogues. From necessity domestic animals must be resorted to. And yet we know not a single domestic animal, but the turkey, the certain wild type of which is known to zoologists. Who can tell the wild type of sheep? Who can tell what change domestication has made upon them? "Abel was a keeper of sheep;" and if the whole race of our domestic breed was not appropriated to man, at his expulsion from Eden, most assuredly the remainder cannot be discovered, by the most elaborate researches. One circumstance makes it highly probable that the whole race was so appropriated; for it is remarkable that this animal will not live, in any climate, without the protection of man. In America the horse, the ox, and the hog, have run wild, have increased, and have resumed uniform colors and habits; but who has, at any time, or anywhere, heard of sheep running wild, and propagating? This is a remarkable fact, and an important item, to prove the Divine origin of the Mosaic history. If he did not write from inspiration, it is a most unaccountable circumstance, that the only animal he mentions to have been the associate of Adam and family, is the only one which, to this day, clings to his posterity for support, protection, and existence.

Profane history gives no intimation of the time when the horse, the ox, the ass, and the camel were domesticated. It is fair, therefore, to presume that

they were all in a state of domestication long before the commencement of such history; and as we have no mention, in any history, that any of them have undergone any constitutional changes, it is also a fair presumption, that they had all arrived at their present permanent characters, long before the era of history: consequently, that domestication has produced no change in them for at least twenty-five hundred years. Sacred history, however, informs us, not positively, but negatively, that sheep, oxen, camels, and asses, were domesticated long before horses. All the other animals, except horses, are mentioned by Moses as common objects of property during the lives of Abraham, Isaac, Jacob, Esau, and Joseph; but the horse is not mentioned until the ninth chapter of Exodus, v. 3; after which he is frequently introduced. It is thus proved, negatively that the horse was domesticated at least five hundred years after the ox, the camel, and the ass; and the sheep is mentioned long before any of the others, and is always enumerated with them. Bu although the horse does not appear to have been domesticated much longer than about fifteen hundred years before the birth of Christ, his type, in a wild state, is entirely lost, and his native country is unknown.

An important circumstance is mentioned by the sacred historian, in the history of Jacob. It is that the cattle and sheep of Laban's herds and flocks had the same constitutional facility to change color, or even a greater facility, than they now possess. This fact leans strongly against the supposition that

their constitutional tendency to change was induced by domestication. It makes it more probable that it was originally inherent in the animals. However this may be, the facts contained in this early history prove positively that there is a marked difference, in different kinds of animals, in regard to the tendency to change color; and, therefore, that no animal is an analogue for another in this respect. The sheep, which is the oldest domestic animal we possess, changes in color only from white to black, or rather dark brown. The ass and the camel, although domesticated simultaneously, or nearly so, with the ox, never assume the variety of colors of this animal; and the horse, the last domesticated, is more variable than any of them. On the theory contended for by writers, that "the state of domestication" produces these variations, the sheep should be the most variable of all of our domestic animals—whereas it is the least variable.

Among some other domestic animals, equally as long domesticated as the horse, at least,—the mouse, for instance,—no disposition to change, in color or form, is known to have taken place. The brown rat, of Persia, although only a domestic in Europe short of three hundred years, and from thence imported into America, has been, from the earliest period, a constant associate and pest of man in Central Asia, without undergoing any known change; and since his wide dispersion over Europe and America, and throughout the Islands of the Pacific, he has invariably preserved his original color and type. Thus it appears, when a comprehensive

view is taken of all domestic animals, the associates of man, that there is a vast difference between them, in respect to changes, even granting, what by no means follows as a matter of course, that domestication produces all the known changes. Hence it is apparent that it should not be taken for granted, that domestic animals should be regarded as the analogues of man, in regard to organic and functional changes.

There is yet another difficulty equally insurmountable. We know absolutely nothing of the wild types of the sheep, the ox, the horse, the camel, and the dog; therefore, as we have said, we cannot say how much, or from what they have changed constitutionally,—or whether they have changed at all. Animals of the ox and horse kinds, which have run wild in our southern prairies and savannas, generally assume a uniform color and shape; but this, although a general, is by no means a universal rule. Many of them have, and retain, a variety of colors. Therefore they prove nothing absolutely, although they afford a reasonable presumption that a large majority of the wild stock was of one color; but the variety of color prevailing among them is equally conclusive that there was, originally, the same diversity in the wild state as in the domestic. It is well known to importers and dealers in hides, brought from California and South America, both of the ox and the horse, that although there is a general tendency to one color, yet there are many of the ordinary colors of our domestic breeds.

It is apparent, from what we have said, that the

advocates for the unity of the human species by reason of analogies with domestic animals, do so by two assumptions:—First, that these animals actually become constitutionally changed, anatomically and functionally, by domestication;—and, secondly, that man is constitutionally similar to any and every domestic animal, and subject to the same changes, although none of them agree with one another.

In regard to food, the difference between men and animals is so great that there can be no just analogy between them. In a state of nature, and in domestication, the sheep, ox, and horse, are exclusively grass-eating animals; but man eats everything, from unctuous clay to the elephant, both included. If animals should be stinted in their only food they must suffer organic changes. They have no resources to fall back upon, nothing to supply their deficiencies. But man, if he has not vegetables and savory meats, can turn to train oil, spiders, serpents, or ant eggs; and although he might not be as vigorous on such diet exclusively, as he would with a constant and more nourishing change, yet he would not be so liable to organic and functional changes, with such a supply in his larder, as the animal whose healthy condition depends upon an abundant supply of a single article. There is, therefore, no analogy between them in regard to food. Consequently the subject we are discussing is divested of all aid from animal analogies, and must be examined on its own facts and merits. This is a most important point gained; for it is

often, and particularly in this case, more difficult to disperse the clouds of error which obscure our object than to discover the truth when we have a clear observation.

We will not follow the advocates of the influence of climate, food, and mode of living, to produce organic and functional differences in the human system, sufficient to account for all known varieties, through all their chain of reasoning; because it all hangs upon animal analogies, from which they have no support, and therefore they are of no consequence. Color, as it relates to the human species, has not been regarded, of late, of as much importance as formerly. We confess ourself at a loss to understand the reason for it, unless it should be, that, if its importance were admitted, the obstacle would be insurmountable. We regard color a decided proof of a peculiar organization producing it. It is positive proof of functional and organic, peculiar or specific organization, when it is invariably transmitted from generation to generation, as we will prove hereafter. The secreting and absorbing organs of an animal invariably of one color, must be very different in their functions from those of another animal of a different color. The osteology of the animal may not exhibit to the anatomist any structural difference; but a difference of the functional system must cause the difference of color, or we know not by what means it is produced. A permanent and transmissible difference of color, therefore, must be accompanied by as permanent a difference of functions, although it may

be impossible to detect it, in all or any of its operations. We know that color is produced by the absorption and reflection of particular rays of light. Color is invariably produced from this cause. A white body reflects all the rays of light, and absorbs none; a black body, on the contrary, absorbs all the rays, and reflects none. A red body reflects the red rays, and absorbs the rest; and so of all other colors. Bodies, therefore, having different powers of reflection and absorption, must be differently constituted. They cannot be identical; because light is a chemical agent, and those bodies which have an affinity for it cannot be identical with those bodies which have no such affinity, or have it in a less degree. Besides the agency of light produces changes, not only in their color, but in their qualities. Plants which grow in the dark will be white, and will have very little taste, smell, or combustible matter. Shortly after being exposed to the light, they acquire a green color, and their taste, smell, and combustible matter, are all considerably increased. The powerful chemical agency of light is also exhibited by the reduction of the metallic oxides, which it accomplishes by disengaging the oxygen gas. The effect of it in bleaching is familiar to all. When it is considered that the differences observed in the whole animal kingdom, especially in the class Mammalia, are to be attributed more to the arrangement of the elementary principles of organization, than to the different elements comprising their systems, we immediately perceive the powerfully distinctive effects which must be produced in one being which

absorbs all the rays of light, from another which absorbs none. Color, therefore, is a highly important item to indicate specific distinctions; and although it is not more important than structure or external configuration, it is, nevertheless, in every other animal but man, always regarded of specific value, when it is permanently maintained from generation to generation.

But it has been contended that climate produces the change of color insensibly, and that white persons exposed to the action of a tropical sun for a long time, may have their natures changed, so as to become perfectly black, together with all the other physical changes, as crisp woolly hair, &c. This is an assumption contrary to all the facts relating to the subject. But be it so, if the advocates of this doctrine like it better, that God should produce specific distinctions, by the gradual operations of His laws, rather than by his own direct agency; the distinction is the same, and ratified by the same Infinite Wisdom. But let us hear no more from such philosophers against the doctrine of Lamarck and others, who contend that the vast variety of organisms were produced by the operation of laws, by development, and not by direct creation. Concede to these ingenious men that a black or white man can, by the operation of law, be converted into each other, and in ten years, if not sooner, the Mosaic account of the creation would find no advocate among the learned, if they had any regard for their reputations.

But so far as it regards the consideration of our

subject, we say again, be it so, that these differences are made by climate, &c. The specific differences remain the same, however they were produced, if they remain, and have remained, the same from time immemorial, and from generation to generation. What difference does it make to zoology, though it does to religion, to tell us that specific differences which can be clearly traced to have existed for 3500 years, and which, from all our knowledge, we have good reason to believe will be perpetual, were produced, originally, by the operation of laws, instead of by the fiat of the Creator, by direct agency? By involving the philosophic question of specific distinction with the moral question of universal brotherhood, nothing can be gained by either philosophy or morals; for, we apprehend, the moral obligation of every man, to do all the good in his power to every other man, is equally imperative under either aspect of the relationship. We confess we cannot see how the obligations of fraternity are increased by making the permanent differences, acknowledged by all to prevail in the different races of mankind, to owe their origin either to the direct or indirect agency of our common Creator.

Independently of this view of the subject we wholly object to the mode of argument hitherto adopted by philosophers, to prove the effects of climate, food, and mode of living, upon the human subject, from individual examples, not only of rare occurrence, but the causes of which are wholly unknown. Chickens have been born with two heads, calves with six legs, and men joined together by a

bone as well as albinoes from black parents, and that a negro man turned white; but no man in his senses would regard these monsters as types from whence to argue that such animals could procreate a like species. When the Baconian method of philosophizing overturned the syllogistic method of Aristotle, which had governed the world of mind for two thousand years, the object of the noble revolutionist was to introduce nature to her proper empire over the operations of the mind, in place of human reason, which had usurped the throne. Since that important revolution, in about two hundred years, man has advanced with such vast and rapid strides, that each step has covered as much space as was covered under the Aristotelian government for the whole two thousand years. The Aristotelians travelled in circles, the Baconians in straight lines. But if the method adopted by many late philosophers, of high standing, to prove the unity of the human species, should be approved, we have discarded the Aristotelian method, and adopted a decidedly worse one in its place; for according to him the demonstration of any general subject must be predicated upon known general principles, which constitute the premises; and the conclusion from them cannot be greater or more general than the premises. Things fortuitous, mutable, contingent, or individual, cannot be the premises of general conclusions. If we should say that

All Africans are black;
One African turned white;
Therefore, all white men were originally black,

we should depart as much from the syllogistic method of the Stagyrite as from the inductive method of Bacon: and yet absurd as the conclusion is, in the above example, most of the conclusions arrived at by philosophers, treating on the Natural History of Man, are of a similar character. For instance, President Smith, in his Essay on Man, is desirous of showing that the color of the negro is attributable to the ardent sun of Africa; and that the crisp and woolly hair is caused by the color of his skin; and he furnishes an example, and infers his conclusions, which we will state syllogistically, as follows:

The Negroes of Africa are black with crisp woolly hair;
A Negro of America turned white and had soft long hair;
Therefore climate produces the color of the skin which produces woolly hair.

That we may not be thought to misrepresent this learned and amiable author, we will give the example and inference in his own words. "Henry Moss," says he, in his Essay, p. 92, "a negro in the State of Maryland, began, upwards of twenty years ago, to undergo a change in the color of his skin, from a deep black, to a clear healthy white. The change commenced about the abdomen, and gradually extended over the different parts of the body, till, at the end of seven years, the period at which I saw him, the white had already overspread the greater portion of his skin. It had nothing of a sickly or Albino hue, as if it had been the effect of disease. He was a vigorous and active man; and had never suffered

any disease either at the commencement or during the progress of the change. The white complexion did not advance by regularly spreading from a single centre over the whole surface. But soon after it made its first appearance on the abdomen, it began to show itself in various parts of the body nearly at the same time, whence it gradually encroached, in different directions, on the original color, till, at length, the black was only left here and there, in spots of various sizes and shapes. These spots were largest, and most frequent, where the body, from the nakedness of the parts, or raggedness of his clothing, was most exposed to the rays of the sun. This extraordinary change did not proceed by gradually and equally diluting the intensity of the shades of the black color, over the whole person at once; but the original black, reduced to spots, when I saw it, by the encroachments of the white, resembled dark clouds melting away insensibly at their edges. The black of his hands, and his face, retained a larger proportion of the black than other parts of the body; of these, however, the greater portion was changed. And the white color had extended itself to a considerable distance under the hair. Wherever this took place, the woolly substance entirely disappeared, and a fine straight hair, of silky softness, succeeded in its room."

Having given this history of the case, he infers the following conclusions, which we also give in his own words. "In the first place, the secretion in the skin which contributes chiefly to the formation of the negro complexion, seems to be the chief cause

of the curl, or woolly appearance of the hair: for wherever the white color in this man extended beneath the hair, there the form of this excrescence was entirely changed.—In the next place, though there was a strong and general tendency in the constitution of this negro to a change of color, yet this tendency was resisted much longer in those parts of the body which were most exposed to the immediate action of the sun's rays than in others. Whence I infer that where any dark color has been contracted by the human skin, the solar influence alone, and the free contact of the external air, will be sufficient to continue it a long time, even in those climates which are most favorable to the fair complexion."

Here we have universal conclusions predicated on individual premises, which, we believe, no logic, ancient or modern, will authorize; but aside from the illogical mode of proceeding, is there nothing in the example itself to excite a suspicion that the observation of the gentleman was not quite as rigid as philosophy, inquiring after truth, instead of inquiring to support a favorite theory, required? What inference, for example, could be sustained from an operation which required more than twenty years to perfect, from the raggedness of his apparel exposing particular parts of his body to the influence of the sun and air? Arewe to understand that the holes in his clothes, for the whole period, always occurred in the same spot? Or did they sometimes happen to be in other spots? Or did the learned President draw his conclusion without knowing how long the clothes

had been torn in the particular spot which he had observed to resist the constitutional tendency to change?

We remember to have seen Henry Moss. If our recollection serves us (we were then young, but his appearance made a lasting impression) he never became a white man. He had a kind of pink-white complexion, which marked him distinctly from white men; but our memory may be treacherous; and as we think it of very little importance to our subject, whether he was so white that he "could not be distinguished from an Anglo-American;" or a pale pink color, we concede the fact. So eager was the President, however, to arrive at the conclusions he desired—that the woolly hair proceeded from the black complexion—and that the black complexion arose from exposure to the sun and weather, that he forgot that Albino negroes have always crisp and woolly red or white hair; consequently, as they are always as white as Henry Moss became, the examples are more numerous against than for his conclusion.

We will furnish another example of similar logic from Mr. Lawrence, who is certainly the most logical writer who has advocated the unity of the human species. In his chapter on "varieties of color in the human species," he enumerated several rare examples of black and white people, who, by intermarriage, have had children of both colors, and not a color intermediate between the parents. Also many examples of domestic animals, of the same species, which had progeny of different colors from the

parents. After these enumerations he arrives at the following conclusion :—

"The common opinion, which refers the characteristic differences of color in the varieties of the human species to climate, and particularly to the degree of solar heat, is entirely unfounded, will, I trust, be fully proved hereafter. Enough has now been said to show that these differences depend on the breed; and that the hue of the offspring follows that of the parents, *excepting in the rare cases of native or congenital variety. The latter examples prove that color is* NOT AN ESSENTIAL CHARACTER OF RACE. *That identity of tint is not necessary to establish descent from a common stock.* These occurrences, together with the numerous examples of the widest deviation in color in animals confessedly of the same species, fully authorize us to conclude that, however striking the contrast may be between the fair European and the ebon African; and however unwilling the former may be to trace up his pedigree to the same Adam with the latter, this superficial distinction is altogether insufficient to establish a diversity of species." Lect., pp. 263--264.

Stated syllogistically his argument would stand thus—

All Europeans are white and all Africans are black;
A black father and white mother had a white and black child;
Therefore "color is not an essential characteristic of" a European or African.

Or this—

All Europeans are white;
A black father and white mother had a black child;
Therefore, ebon Africans have descended from the same Adam with Europeans, and are of the same species.

To say nothing of the logic, we may be permitted to ask, where did the black father come from, who married the white woman? The answer is from the rare cases of native or congenital variety." Although he has informed us that "the theory of unity of the species would be untenable, if it depended on proving that such varieties occur, yet he does not hesitate to assume them as having occurred, and to base the whole of his argument for the unity of the species upon the fact that they have occurred.

We have not introduced these examples from Smith and Lawrence for the purpose of exhibiting the fallacies of their arguments, in particular; but for the purpose of giving examples of the whole class of similar arguments which have been used in the investigation of this subject. There is not, in the whole circle of the sciences, an instance to be found in which men of acknowledged wisdom, learning, and skill in argument, have so much disregarded all the principles of logic and inductive philosophy, have assumed positions, and jumped at conclusions—as in the Natural History of Man.

As Dr. Smith is an American author, and a man whose veracity is above suspicion; and, therefore, as his authority on a particular matter of fact he states might lead to error, we take the liberty of quoting him again, for the purpose of correcting an error of judgment,—or, probably, an impression made by reason of his partiality for his theory. Lord Bacon calls the biases and prejudices of the human mind, "idols of the human understanding," which are

causes of false judgment; and we can only attribute to these causes his error of judgment in the quotation we are about to make. After a faint effort to account for the peculiar negro features, by the operations of climate, state of society, habits of living, and artificially flattening the noses of children in infancy, &c., in page 114 of his Essay he says—"But, to whatever causes the appearance of these features in the natives of Africa ought to be ascribed, they seem to be in a good measure local; and dependent, at the same time, in some degree, on the manner of living. *For it is an undoubted fact that the descendants of that race in the United States, are gradually losing those peculiarities so offensive to our eye.* In those black slaves, especially, who reside constantly in the mansions of their masters, and who are treated with that lenity and kindness which the greater portion of them who are placed in that situation experience in these States, *we often see the nose finely turned*, and rising handsomely from the face; and the lips, though gently swelled, have lost that unsightly protuberance so common among their ancestors in Africa. The African features, however, vanish much more slowly in those slaves who are subjected to the severer labors of the field, and the coarser, and less nutritious fare of the plantation quarters in the Southern States. A fact which seems strongly to indicate that this variety of the human countenance does not depend merely on the influence of the climate, but is connected also, in some measure, with the manner of living and the habits of the people."

We would have supposed that Dr. Smith, who at

one time lived in Virginia, would have known several other causes, besides climate and mode of living, which operated upon the countenances of our Southern slaves, and especially upon domestic servants. To say nothing of occasional crosses with the whites, it is a well known fact that domestic servants, in the South, are *always selected* from what they call their most likely, active, and intelligent negroes. By so doing the master accomplishes two important objects to his interest—First, he is more agreeably, neatly, and expeditiously served;—and, secondly, if he should want to sell, a good likely servant will command a higher price in the market, than one negro-featured. Consequently, house servants are a selected people,—chosen with direct reference to the features, intelligence, and activity, which distinguish them from the generality of Africans. Except as produced by the operation of known causes, independent of climate, mode of living, and the habits of the people, we deny that the negro features, or organization, are undergoing any, the slightest change from their original types, by their habitation with us. We have been much in all the slave States of the Union, and have never seen an instance of departure from the original type, in any negro, which could not be accounted for upon ordinary principles, without philosophical research or acumen. All the negroes of Africa have not precisely the strongly typical features and formation of those of Guinea; nor did all the negroes, now in this country, originally come from any one tribe, or nation, of Africa; therefore there will be some diversity of

features among themselves. But the negro type in this country is yet in its purity, wherever it has not been interfered with by other causes than climate, mode of living, and habits of the people.

The extreme urgency of the doctrine that climate, mode of living, and habits of the people, cause the varieties of organization and color in man, has compelled its advocates, in some instances disingenuously, to resort to examples which could only be available by a suppression of part of the facts. Of this kind is the example of the Portuguese colony, which, upon the early discovery of the country, was established in Congo, and which is now lost by amalgamation with the negro inhabitants. The story is told so as to leave the impression that they are lost by being turned to negroes by the effects of the climate, &c., which, if true, would be a decided case in point. It is true, that they are lost to the whites, though some slight traces of the European countenance are yet preserved in their descendants; but climate and manner of living had far less effect in making them negroes, than their intermarriages with the blacks, for about fifteen generations;—mixture enough, in all conscience, to lose a small colony of whites among a large body of blacks.

We know of no example to prove the inefficacy of climate and mode of living to produce organic and functional changes in the human system, to the extent ascribed to these causes, more appropriate and more striking than the Jews. Wonderfully preserved as a distinct race, as well by their religion, as their persecutions,—dispersed over the whole civi-

lized and semi-civilized world,—they nevertheless preserve their peculiar characteristics so remarkably, that they are recognised at a glance, whether seen on the Exchange of London, or in the cities of Asia or Africa. They are a nation without territory, a people without a home; mixing with all nations and all people, and yet as distinctly a nation and people as they were two thousand years ago, when they enjoyed everything to constitute them a nation and people.

All the races of men, except the Japhethites, possessing the peculiar specific organizations and features observable at the present day among them, can be clearly traced back for more than 3,500 years, in the tomb of *Ousirei*, as certainly as if their representations were made yesterday. From this period to the flood, by one version of the Bible, is about 800 years, and by another 1,500 years. Take the longest period; and also grant that some of the grandchildren of Noah, before the confusion at Babel, were placed in some position where climatic influences were favorable to the necessary organic changes, which is at least giving up, for argument sake, 500 years; yet the Jews have been actually wanderers in all climates for over 1,700 years; persecuted, trampled on, and ground to the earth by all people; made the most wretched of the most wretched everywhere; and yet to this day, whereever they are found, we recognise a descendant of Jacob, whether embrowned by the climate of southern Asia or Africa, or blanched by the more benign climate of Europe, as perfectly as they were known

at any period during their glory. In the face of such facts, we find eminent men contending for the gradual influence of climate, mode of living, and habits, to produce organic and functional changes in the human constitution!

If all the different colors which distinguish the different species of men were confined to particular latitudes;—all black people in the torrid zone; all red people in the north and south halves of the south and north temperate zones; all the yellow people in the remaining halves of the temperate zones; all the white people in the frigid zones;—and if all the races gradually ran into one another at the bounds where they met,—such an arrangement for climatic influence operating on the human constitution would be sufficient to throw the burden of proof to the contrary on those who might deny its influence. Such is not the arrangement of the Creator. Even near, and under the equator, in Africa, people are found of lighter color than others, on the same continent, in the south temperate zone. The Abyssinians are dark olive, and the Gallas only light brown, while the Kafirs are jet black. But why specify particular people? Do we not find that the true negro type is found in all climates from the equator to Van Dieman's land in 43 deg. south latitude? And that even in New Zealand, in south latitude 48 deg., a dark colored race? According to the climatic theory these people should be white; whereas there is no native white race throughout Australasia and Polynesia.

Mr. Lawrence, who always argues well, until he

arrives at the point from whence species are to be inferred, has so elaborately investigated this subject that we cannot conclude this chapter better than by borrowing a few extracts from his lectures. They are entitled to more weight because he is known to be one of the most able advocates for the unity of the human species.

"I proceed to show that climate does not cause the diversities of mankind; and in this consideration my remarks are chiefly directed to the color of the skin, as that is the part in which its operation has been regarded, by all the defenders of its influence, as the most unequivocal: the reasoning, however, will apply in general to the other points of difference, as well as to this."

"The uniform color of all parts of the body is a strong argument against those who ascribe the blackness of the negro to the same cause as that which produces tanning in white people; namely the sun's rays. * * * Neither is the peculiar color of the negro confined to the skin; a small circle of the conjunctiva, round the cornea, is blackish, and the rest of the membrane has a yellowish-brown tinge. The fat has a deep yellow color, like beeswax, at least in many of them; which may be distinguished, by a very superficial inspection, from that of an European. The representation that the brain of a negro is darker colored than that of the white races, is not correct." Lect., pp. 447, 448.

"If we take the trouble of examining the races in any particular division of the world, we shall quickly find that the opinion which ascribes their distin-

guishing characters to climate, must be given up; that the same race inhabits the most different regions, preserving in all an uniformity of character; that different races are found in the same countries; and that those who have changed their native abodes for situations, in which, according to the hypothesis, they ought to have undergone a complete metamorphosis, still retain their original distinctions." p. 449.

He then enters upon a particular examination of the inhabitants of Europe and Asia, and of the opinions of Buffon and Smith, which he concludes with the following remark—"The foregoing statements authorize us in concluding, that in Asia, where we have countries with every variety of temperature, at every distance from the equator, mountains, valleys, plains, islands, and continents, no effect of climate can be traced on the color, or any other characters of the human race." p. 457.

He now examines the inhabitants of Africa, Madagascar, and the two continents of America, stretching from near the North pole, to 55 degrees S., and concludes with the following queries:—

"How does it happen, that the same sun, which makes the African black, tinges the American of a copper color? and that the dark hue, which might possibly be contracted by heat, in the equatorial regions, should be found also in the cold and inhospitable regions of Terra del Fuego, and the most northern part of the continent? The absence of white races can surely not be ascribed to the want of sufficiently cold climates. *Bougainville* found the thermometer, in the middle of summer, fifty-four and

a half degrees in latitude fifty-two degrees S.; and Messrs. *Banks* and *Solander*, and their attendants, had nearly perished altogether from the cold, in an excursion in Terra del Fuego, in the middle of summer. Two of the servants were actually lost." p. 462.

He next enumerates, and examines migrating nations, which have located in different climates, and arrives at the following conclusion :—

"The foregoing facts sufficiently prove, that native differences in general, and particularly that of color, do not depend on extraneous causes: I have an observation or two to make on other points. That the curled state of the hair in the African is not produced by heat, appears from its being found in situations not remarkable for high temperature, as in the Moluccas, New Guinea, Mallicollo, Borneo, New Holland, and even in the cold regions of Van Dieman's land; as well as from the hot regions of Asia and America being inhabited by long haired races. The woolly appearance of the negro hair is just opposite to that which hot climates have been said to produce in the covering of sheep, in which, it is represented, that hair is produced, instead of wool." p. 468.

We have made a free use of the labor of Mr. Lawrence, because his facts and arguments are unanswerable. We have only given his conclusions, because the geographical and historical facts upon which they are based must be familiar to readers, and our work promises to be larger than we designed.

Were it not that he was embarrassed by animal analogies, the force of the facts contained in this 9th Chapter of Mr. Lawrence, would have compelled him to admit distinctions of species in the human family. His concluding paragraph is more than half a confession to this effect, and seems to imply a doubt in his mind about the just application of such analogies.

"If," says he, p. 470, "in investigating this subject, *we are satisfied with comparing the existing races of men to those of domestic animals*, and with bringing together the characteristic marks, on which the distinctions are grounded in the two cases, as I have done in several preceding chapters, we shall have no difficulty in arriving at the fifth conclusion. *If, however, we should carry ourselves back*, in imagination, to a supposed period when mankind consisted of one race only,—and endeavor to show how the numerous varieties, which now occupy the different parts of the earth, have arisen out of the common stock, and have become so distinct from each other, as we find them at present,—we cannot arrive at so satisfactory a decision: and we experience further embarrassments from the fact, that the races of men have been as distinctly marked, and as completely separated from the earliest periods, to which historical evidence ascends, as they now are. The same remarks, in great measure, are true, concerning animals; so that, on this ground, no difficulty prevents us from recognising the unity of the human species, which is not equally applicable to them."

His strong mind saw that animal analogies would

scarcely satisfy all hearers and readers. They are evidently not satisfactory to himself, and probably were used because others had used them, without an examination of their application to the subject, or a question as to their propriety.

CHAPTER VII.

WHAT CONSTITUTES A DISTINCT SPECIES.

Much controversy has prevailed among the learned, in regard to the proper definition of the word species. A part of the difficulty has arisen from the metaphorical, instead of the literal sense, in which the word is now used; but a more important part of the difficulty arises from the want of accurate knowledge of the things to be classed. When classification depended more upon external form, than upon anatomy and physiology, it was, comparatively, an easy operation to arrange forms under their specific heads. Then the definition of species, as a "combination of individuals alike in all their parts" was of easy application. In the progress of science it was soon found not to answer the purpose, and species was then defined to be "a collection of individuals which will breed together, and produce fertile offspring." Hybridity thus became a test of species; and if it could be applied to all cases, it might have answered the purpose. This is impossible. Even in cases which came more immediately under our eyes, and were more immediately under our control, than a vast majority of cases could be in natural history, a rigorous application of the rule of absolute sterility of progeny, would have to be abandoned. The horse and the ass furnish a

strong example of the truth of this remark. In general the progeny of these two are incapable of reproduction; but several instances are on record to prove, that, under certain favorable circumstances, they can procreate. The dog and the wolf are known to be anatomically different; and the time of gestation by the wolf is ninety, and by the dog sixty-two days; and yet they will cohabit, and the progeny, in most instances, are capable of reproduction. The lion and the tiger will cohabit, in confinement, and have cubs; but it is not known whether the progeny will reproduce.

Such examples forced upon naturalists the necessity of modifying the rule, or definition of species. The idea of hybridity was not abandoned; for it was reserved in a hypothetical, but abandoned in an actual sense. M. De Candolle, therefore, says, a species is "a collection of all the individuals which resemble one another more than they resemble anything else; and which *reproduce* by generation, in such a manner that we may, from analogy, suppose them all to have sprung from a single individual." He thus combined both the classifications, that of form and hybridity, the latter being modified by hypothesis, which was worse than a rigorous adherence to the rule. Analogy is sometimes a useful mean of ascertaining truth, but is more frequently a cause of error. It is a dangerous and slippery instrument to use in philosophical investigations; and it becomes doubly dangerous when used in definitions which are the foundations of the subjects investigated. It has been the fruitful cause of nearly all the

embarrassments and difficulties in the Natural History of Man. But the chief difficulties have been produced, in this respect, not so much by the definitions themselves, as by the extremely loose manner of adhering to them, and the various additions and alterations made to them, by authors of eminence, as they progressed with their works. A definition signifies nothing, however correct it may be, unless it governs the subject of it throughout the work. We will presently make a hasty examination how far this has been done by the two great authors, who are now regarded as standard authorities on the Natural History of Man. We will first proceed with the definition of the word species.

Mr. Lawrence, p. 87, of his "Essays on Man," informs us "that a certain external form belongs to each animal, and that it is continued by "generation." * * "All animals belonging to one of these forms constitute what zoologists call a SPECIES." He subsequently, in pp. 89–90, gives his more formal definition, as follows—"Proceeding then, on the criterion of definite form, transmitted by generation, we may define species as a collection of all the individuals which have descended one from the other, or from common parents, and of all those which resemble them as much as they resemble each other." This is a repetition of De Candolle's definition, in fewer words, a little differently arranged, and, we think, more objectionable, because it does not define it as accurately. The latter clause of the definition—"and all those which resemble them as much as they resemble each other" is more

confused and uncertain, than M. De Candolle's "individuals which resemble each other more than they resemble anything else." It will read thus, if the nouns should be substituted for the pronouns,—"all those which resemble the parents as much as they resemble each offspring." Hence it follows from this clause of his definition, that if a family of children, all known to have descended from the same parents, resemble neither the parents nor one another,—or if they resemble the parents less than they resemble each other,—they are not of the same species. Many such instances have happened. Mr. Lawrence has furnished more than a dozen examples of them besides the porcupine men and Albinoes. De Candolle's parallel clause, "individuals which resemble each other more than they resemble anything else," is not liable to the same objection; for although it is more indefinite in terms, it produces less confusion in its consequences. It is apparent, therefore, that Lawrence has not improved upon De Candolle.

Dr. Prichard, in his "Natural History of Man," section 3, p. 10, after reviewing the definitions of his predecessors, and agreeing with M. Flourens, that all previous definitions were imperfect, gives the following—"Species, then, are simply tribes of plants or of animals which are certainly known, or may be inferred on satisfactory grounds, to have descended from the same stocks, or from parentages precisely similar, and in no way distinguished from eachother;"—excepting one clause this is decidedly the best definition we have seen. Let us analyze

it. "Species, then, are simply tribes"—that is, distinctly set apart from all other tribes or classes. This is, certainly, the proper idea of species; a class of beings set apart from all other beings in a tribe, ward, or space, particularly appropriated to them. Scarcely any other word would have been as descriptive as this word "tribe," and therefore Dr. Prichard has exhibited his classic taste by the selection. It has much the advantage of Mr. Lawrence's "collection of all the individuals," which, although more verbose, does not precisely express the idea, does not precisely hit the object; because species is not only a "collection of all the individuals,"—it is also a separation of a class, a body of individuals in a *tribus*, ward, district, scientifically a species, distinct from others not of the same ward, district, or class. The word is, therefore, happily chosen. The words "of plants or of animals" call for no special remark. The word "plants" might have been omitted, as his subject only related to man. By attempting too much we sometimes hazard what we desire to secure. Botanists might have been left to frame their own definition. The next clause—"which are certainly known,"—is framed with more caution. It is keeping rigorously within the limits of science. Certainty is the aim of science; and therefore the words "certainly known," are rigidly exact. But this, although highly desirable, is not always attainable; and the objects of science would be immensely curtailed, if all knowledge were restricted to what could be certainly demonstrated. For this reason the learned author has very properly added to this

clause the words, "or may be inferred on satisfactory grounds." These words are sufficiently guarded to prevent looseness, or indefiniteness. He is speaking philosophically, and must therefore mean a strictly logical inference, from sound premises. It is preferable to De Candolle's parallel clause, which "we may *from analogy suppose* them to have sprung from a single individual;" because it dispenses with analogy and supposition, both of which are inadmissible as the foundation of a science. Sound reason, however, is an admissible foundation; and therefore, says Dr. Prichard, it must be "on satisfactory grounds,"—that is, "grounds" which would satisfy philosophers experienced in ratiocination. The next clause is "to have descended from the same stocks"—which is again exact. The word "stocks" is the first and only word used in the definition in a metaphorical sense, and is therefore somewhat objectionable. But it is, nevertheless, sufficiently distinct to avoid confusion of ideas. We would have preferred the word parents; but Dr. Prichard aimed at a definition sufficiently comprehensive to include all organisms, whether of "plants or of animals;" and parents would be more objectionable applied to plants, than the word "stocks" is to animals. His next clause,—"or from parentages precisely similar," gives "stocks" a precise meaning. The word "similar," is a little loose, notwithstanding the word "precisely" prefixed to it; because no likeness is precisely the thing itself. The clause might be amended thus—"or from parentages of identical original derivations,"—which is clearly what he

means. But although it is of the utmost consequence, in matters of science, to be accurately correct in definitions, yet it may appear to be a little hypercritical to object to the word "similar;" we therefore pass to his concluding clause—"and in no way distinguished from each other." All the previous clauses are sufficiently clear to convey exactly the author's meaning; but we are really at a loss to comprehend this clause. Construed rigidly, as we have the previous clauses, it signifies that progeny, although "certainly known to have descended from the same stocks," if they can be in any "way distinguished from each other" are of different species. Therefore, if one should have red hair and another black, they are of different species. This is the true sense of the clause; but it is not what the author designs. It is a very important clause, because it controls those previous to it in the definition. It is the pivot of the whole; and, therefore, if we can discover the meaning of it, it should be disclosed.

In his immediately succeeding section he treats of Hybridity, a condition in which progeny are very importantly distinguished from both parents;—and in sections 5 and 6 are numerous examples of "mixed races" of men,—Cafusos—Papuas—and Griquas—all of whom the author considers "conclusive proof" of the identity of species of the human family; insomuch that he considers "the solution of the problem which we have undertaken to discuss might be left on this issue, or considered as obtained by this argument." And yet these people,

by all he has said of them, and by the pictures he has furnished, are so strongly "distinguished from each other" that we must confess we have not yet found his meaning of the clause. If, with this definition in our hands, we examine the beautiful colored engravings in his book, we shall find them so "distinguished from each other," that we must immediately say they are of distinct species. If we examine the inferences he has drawn from the examples he has furnished in the progress of his elaborate work, we shall be left equally in the dark. In section 9, in his "concluding observations on the theory of the variation or degeneration of animals," he remarks, that the "races of men are subjected, more than almost any race of animals, to the varied agencies of climate. Civilization produces even greater changes in their condition, than does domestication in the inferior tribes. We may therefore expect to find fully as great diversities in the races of men as in any of the domesticated breeds. The influence of the mind must be more extensive and powerful in its operations upon human beings than upon brutes. *And this difference transcends all analogy or comparison. A priori*, we might expect to discover in the psychological characters of human races changes similar in kind, *but infinitely greater in degree.*"

"In the following chapters of this work I shall proceed to survey the phenomena of diversity displayed by human races in all the three points of view to which I have adverted. In each respect I shall ascertain whether there is a common specific type

preserved amidst all the varieties which display themselves, and shall endeavor to determine whether the differences which are found when remote and diversified human races are compared with each other are such as fall within the limits of the principle of variation." Nat. Hist. of Man, p. 75.

In these two paragraphs the learned author acknowledges a diversity of the human races by which they may be "distinguished from each other;" but he is to devote the remainder of his work to show that his definition is incorrect, because such distinctions "fall within the principles of variation." Varieties, he informs us, p. 11, "differ from species in this circumstance, that the peculiarities in question are not coeval with the tribe, but sprang up in it since the commencement of its existence, and constitute a deviation from its original character." Having now formally abandoned his definition (he abandoned it informally as soon as he wrote it, for he paid no regard to it), we will abandon it too, and trace the new principle which is to govern his further labor. Inasmuch as varieties only "differ from species in this circumstance, that the peculiarities in question are not coeval with the tribe," the definition of varieties would be simply—"tribe of plants or of animals which are certainly known, or may be inferred on satisfactory grounds, to have descended from the same stocks, or from parentages precisely similar, *and in no way distinguished from each other;*" but whose "peculiarities in question are not coeval with the tribe."—This would be a fair, but severe rule to apply to his remaining chapters,—and would

immediately settle the subject. But we waive it, and will confine our future remarks to the new position assumed, that the diversities "fall within the limits of the principle of variation." The points to be proved in the consideration of this question are, 1st. "That the peculiarities in question are not coeval with the tribe." 2d. That they "sprang up in it since the commencement of its existence." And 3d. That they "constitute a deviation from its original character." The most important of these is the first, the others depending on it.

It is not necessary for us to follow the learned author through various sections, from 10 to 14, both inclusive, relating to "the diversities of organization in different races of men;" because at the conclusion the pith and marrow of them is contained in the following paragraph, at page 131:—"In surveying the facts which relate to difference in the shape of the body, and the proportions of parts in human races, we may conclude that none of these deviations amount to specific distinctions. We may rest this conclusion on two arguments; first, that none of the differences in question exceed the limits of individual variety, or are greater than the diversities found within the circle of one nation or family; secondly, the varieties of form in human races are by no means so considerable, in many points of view, as the instances of variation which are known to occur in different tribes of animals belonging to the same stock, there being scarcely one domesticated species which does not display much more considerable deviations from the typical character of the

tribe." We will not now notice the assumptions contained in these two propositions, as they will be the subject of remark hereafter. But we ask, in what do they show that the diversities in question were not "coeval with the tribe?" "sprang up in it since the commencement of its existence?" or that they "constitute a deviation from its original character?" These were the points to be proved; and yet throughout the whole fifty-five pages he does not touch upon them. We need pursue it no farther, and conclude by saying that Dr. Prichard's Natural History of Man is valuable for the facts it contains; but that none of his general conclusions are fairly deducible from his premises.

Having briefly examined Dr. Prichard's definition of species, and his mode of applying, or rather not applying it to his subject, we must also briefly notice Mr. Lawrence's method of conducting his argument. We have selected these two authors because they are eminent, the latest on the subject, and are the most generally known.

We repeat his definition of species—"Proceeding, then, on the criterion of definite form, transmitted by generation, we may define species as a collection of all the individuals which have descended one from the other, or from common parents, and of all those which resemble them as much as they resemble each other."—This definition presents two points as conditions of species. 1st. Descent from common parents—and 2d. Equal resemblance to parents and progeny. Having already noticed the incongruity of these conditions, when we examined Dr.

Prichard's definition, we need not repeat them. In page 233 of his Lectures, Mr. Lawrence informs us of the mode of practically applying his definition. "If we see two races of animals resembling each other in general, and differing only in certain respects, according with what we have observed in other instances, we refer them without hesitation to the same species, although the difference should be so considerable as to affect the whole external appearance: on the contrary, if the difference should be of a kind which has never arisen within our experience of the animal kingdom, as a variety, we must pronounce them to belong to a distinct species, even though there should be, on the whole, a great general resemblance between the two." It is apparent that this rule is directly opposed to that contained in his definition. In his definition, as we have said, two conditions are necessary to constitute species—viz., Descent and Resemblance. In this second rule, descent is wholly dismissed—and "a great general resemblance" amounts to nothing, unless it "should be of a kind which has never arisen within our experience of the animal kingdom, as a variety." This was a most convenient and necessary change of position; for it threw open to him the whole animal and vegetable world as analogues for man, instead of descent and resemblance, which confined him exclusively to the human race. And, in order that he might stand on firm ground in his new position, he immediately afterwards assumed as a fact, what his new rule required to be proved, viz., that "there is no point of difference between the several

races of mankind, which has not been found to arise, in at least an equal degree, among other animals, as a mere variety, from the usual causes of degeneration." p. 234.

We content ourself with this one example, for the present, as we shall have occasion to notice others hereafter.

If we were writing merely for victory over opponents, or to establish a favorite theory, instead of for the purpose of placing the Natural History of Man in its proper niche in the temple of Natural Science, we could not be better suited with a definition of species,—one that would answer our object more perfectly, than Dr. Prichard's, or Mr. Lawrence's. But they are framed upon principles acted upon in no other department of natural history, and abandoned by themselves in the progress of their works. Therefore, we prefer to seek a definition more in accordance with the universal practice of naturalists. In no other department of zoology is an identity or distinction of species made to depend upon descent from a single pair, as a condition precedent, except by implied inference. We grant that the Mosaic account of the creation, and therefore our religion in some degree, imposes upon us a necessity to account for the origin of the human species in harmony with it; nor have we manifested a desire to avoid this responsibility. But as a mere question of science, it might have been discussed upon scientific principles, independent of the theological question, so far as it regards species, if the investigation should not

lead us necessarily to highly probable proof of the truth of Genesis.

It is conceded by all naturalists, that although different species of animals may be made to cohabit, by some constraint, or by artificial means, in a state of confinement or domestication, yet, in a state of nature, such unions are exceedingly rare, and almost unknown. A natural repugnance to such unions is one of the great barriers interposed by the Creator to a confusion of species. But it is not the only one; for when it is transgressed it is invariably followed by hybridity. But hybridity does not necessarily imply absolute sterility. If it does, there is scarcely any such thing in nature; for there are very few hybrids absolutely sterile. A few may be sterile; but by far the greater number, if not preserved by occasional dashes, or crosses, to preserve their condition, manifest a constant tendency to return to the original stock, or stocks, from whence they sprang, or they ultimately become extinct by imbecility. Dr. Prichard acknowledges this view of the subject in his Natural History of Man, pp. 16, 17, where he quotes the following extract "from the pen of Professor Wagner:"

"1. That hybrid plants in a natural state are very seldom produced, and that the greater number of the reputed instances rest on no sufficient evidence. 2. That hybrid plants are seldom fruitful among themselves, but that such hybrids as the *verbascum hybridum* and the *digitalis purpurascens*, from the *d. purpurea* and *lutea*, according to the corresponding observations of Koelreuter and Wiegmann, and all

others which hold exactly an intermediate place between the parents, are absolutely barren; while those which, owing to the proportion of pollen, *partake more of either kind*, and those which spring from the fertilization of such hybrids among themselves, are occasionally propagated. 3. That plants produced from different varieties of the same species are altogether fertile, and that no impediment exists to their propagation; *while hybrids either revert to the original character, generally of the maternal parent, or become gradually less capable of reproduction, and within a few generations, entirely extinct.*"

Immediately following this quotation, Dr. Prichard remarks—"A similar law prevails in the animal creation, and its effects are, on a great scale, equally constant and uniform. Mules and other hybrid animals are produced among tribes in a state of domestication; but, except in some very rare instances occurring in particular tribes of birds, they are unknown in the wild and natural state. *Even when individual hybrids are produced, it is found impossible to perpetuate from them a new breed.* IT IS ONLY BY RETURNING TOWARDS ONE OF THE PARENT TRIBES THAT THE OFFSPRING OF THESE ANIMALS IS CAPABLE OF BEING CONTINUED IN SUCCESSIVE GENERATIONS."

This is precisely our doctrine. That we draw very opposite conclusions from it, than those so triumphantly inferred by Dr. Prichard, will be seen in its proper place. Our present object in introducing the subject is to show that the *hybrid is not always sterile; and that, when prolific, it is always accompanied by a tendency in the hybrids to return to the original stocks from whence they sprang.*

The next principle is, that *uniformity of anatomical and physiological organization is the essential principle, or element of identity of species.*

In every species there is a certain type, or standard of structure and function,—a central point,—far from which no member of the species wanders, without impairing the procreative powers. Structure and function always accompany each other. It is upon these facts that Comparative Anatomy and Physiology have been erected into sciences; that zoology has been so far perfected, upon so sure a basis, that a Cuvier and an Owen can, from the sight of a single bone of an unknown animal, furnish a perfect skeleton of it, and a perfect history of its functions, manners, and habits, and consequently can place it in its proper division, class, order, genus, and species.

So far there can be no dispute. The next step in our progress, to ascertain precisely what is understood by species, will be a little more difficult, and will require more labor. Although there is a certain type or standard of structure and function in every species, yet a certain degree of variation, or departure, from the standard may take place, without forfeiting caste in the species. Nay, it is so ordered by Infinite wisdom, especially in respect to the human species, that no single individual shall fully represent this standard,—shall occupy the central spot; but rather that every one shall revolve in an ellipsis rather than on its own axis in its own space, some approaching nearer, and having smaller orbits than others. What, then, shall be the greatest

extent of these orbits;—what the greatest departure from the standard of species consistently with belonging to it? This is the question now to be determined. To accomplish this task we shall not look for definitions, which are always couched in general terms, and vary almost with every author; but for facts, which speak unequivocally, and in which all agree; and then, if we can, we will make a definition from the principles they indicate. We will begin with anthropoid animals, because they were, for a long time, classed with man, and are certainly nearer to him in structure than any others in the animal kingdom.

Zoological character is indicated by anatomy and physiology. These, however, include everything which can distinguish one animal from another; such as color, form, size, motion, internal organization, digestion, assimilation, nutrition, secretion, instincts, intellects, &c. Although some of these may be of less value than others, as proofs of zoological character, yet there is no one of them which is not admitted to be conclusive, when it is known to be invariable and permanent in the individuals composing the race; and especially if it is accompanied, as it is most frequently, by slight and in many instances by important differences in other respects.

It is well known that the orang utan of Borneo (the Simia Satyrus of Linneus), and the chimpanzee of Africa, were, for a long time, regarded as of one species. Mr. Owen, in an excellent paper, "On the Osteology of the Chimpanzee and Orang Utan," has settled the question. The following is his summary

of the comparative anatomy of the chimpanzee, the orang utan, and man, which will furnish us with several important facts, derived from the highest authority as to what constitutes specific, and generic zoological character. He makes no attempt to trace descent; but states that the chimpanzee differs osteologically from the orang: 1. In having the cranium flatter and broader in proportion to the face. 2. In having the superciliary ridges more developed, and in the absence of the interparietal and sagittal crests. 3. In the junction of the temporal with the frontal bones. 4. In the greater proportional breadth of the inter-orbital space. 5. In the more central position and less oblique plane of the occipital foramen. 6. In having but one anterior condyloid foramen on each side, while the orang has two. 7. In having generally but one suborbital foramen on each side, while the orang has three or more. 8. In the persistence of the cranial sutures. 9. In the earlier obliteration of the maxillo-intermaxillary sutures. 10. In the smaller proportional size of the incisive and canine teeth, and consequent smaller development of the jaws, especially of the intermaxillary bones. 11. In the smaller proportional size of the cervical, and larger proportional size of the lumbar vertebræ. 12. In the additional dorsal vertebra corresponding to the additional pair of ribs. 13. In the more complex composition of the sternum, which consists of a single and not double series of bones, as in the orang. 14. In the greater sigmoid curve of the clavicle, which in the orang is nearly straight. 15. In the less pro-

portional breadth of the scapula, and the more lateral aspect of the glenoid cavity. 16. In the less proportional breadth of the *ilium*, and greater expansion of the *ischium*. 17. In the less proportional breadth, and greater length of the *sacrum*. 18. In the comparative shortness of the upper extremities, more especially of the forearm and hand. 19. In the non-division of the pisiform bone of the wrist. 20. In the greater proportional length of the *femur* and *tibia*, and the less proportional length of the foot. 21. In the presence of a *ligamentum teres*, and consequent depression in the head of the *femur*. 22. In the greater proportional size of the *tarsus* as compared with the *phalanges* of the toes. 23. In having constantly two *phalanges* in the great toe, with a nail, while the ungueal phalanx and nail are often wanting in the *hallux* of the orang, especially in that of the female.

This comparison of the chimpanzee and orang is closely critical, and is regarded as conclusive evidence of specific differences. M. Cuvier placed the chimpanzee below the orang, in his arrangement; but Owen reverses this order, because the chimpanzee agrees more nearly with man in his osteology. In all these twenty-three differences between these animals, abundantly sufficient to make them distinct species, there are only four instances of really distinct structure, viz., the 12th, an additional pair of ribs; the 13th, a single, and not a double series of bones in the sternum; the 19th, the non-division of the pisiform bone of the wrist; and the 23d, the having two *phalanges* in the *hallux*, or great toe, with a

nail. All the other differences are small, and relate to shape, length, or persistence of corresponding parts. We do not mean to say that these circumstances are unimportant; far from it; we know that function invariably follows organization; and that all the habits and instincts of the animal depend upon it. Even in animals of the same species, those slight osteological differences which are consistent with identity of species, are always followed by corresponding differences of manners, habits, and instincts or mental powers. But we call attention to the fact that the chief differences relied upon, in the above enumeration, to establish a specific difference, and to reverse the positions of the respective animals, are to be found in less or more of the same things.

It is also known that the chimpanzee and orang were placed by Linneus under the genus *Homo;* but Mr. Owen shows conclusively, in the same paper, that there is a generic difference in their osteological structure from man. The chimpanzee and orang differ from man, he says—1. In the *diastema*, or interval between the *cuspidati* and incisors in the upper jaw, and between the *cuspidati* and *bicuspides* of the lower jaw. 2. In the greater magnitude of the intermaxillary bones, indicated in the adult by the distance of the *foramina incisiva*, from the incisive teeth, both of which differences result from the greater proportional development and different forms of the *cuspidati* and incisors. These he considers of generic value. 3. In the more backward position and oblique plane of the occipital

foramen. 4. In the smaller proportional size of the occipital condyles. 5. In the larger proportional size of the petrous bones. 6. In the greater proportional development of the jaws. 7. In the flatness of the nasal bone, which is rarely divided in the mesial line, while in man the nasal bones are rarely consolidated into one. 8. In the presence of the ant-auditory process of the temporal bone, and the absence of the mastoid and styloid processes. 9. In the absence of the process of the ethmoid, called the *cristi galli.* 10. In the shortness and comparative weakness of the lumbar region of the spinal column, which is also composed of four instead of five vertebræ. 11. In the narrowness and proportional length of the *sacrum.* 12. In the flatness of the *ilia,* and the larger development and outward curvature of the *ischia.* 13. In the position of the pelvis in relation to the spine. 14. In the larger proportional development of the chest. 15. In the greater length of the upper extremities. 16. In the wider interval between the *ulna* and *radius.* 17. In the shortness and weakness of the thumb, and narrowness of the hand in relation to its length. 18. In the shortness of the lower extremities. 19. In the greater proportional length and narrowness of the foot. 20. In the small size of the *os calcis.* 21. In the shortness and opposable condition of the *hallux.*

"These differences," says Mr. Owen, "result from original formation, and are not liable to be weakened in any material degree, either on the one hand by a

degradation of the human species, or, on the other hand, by the highest cultivation of which the anthropoid apes are susceptible."

All these twenty-one differences, except the 8th, 9th, and 10th, are, strictly speaking, only less or more of the same parts, in length or form. The exceptions are of slight comparative importance, although, as we have said before, all differences are of absolute importance. They consist merely of the presence or absence of mastoid or styloid processes, and the addition of one vertebra. The differences upon which the generic character is made chiefly to depend, are the two first items relating to the intermaxillary bones, the peculiar formation of which gives rise to the size and form of the cuspidati and incisors. The value of teeth, in regard to position, kind, and number, to denote generic character, must be manifest to any person who barely looks into a work on zoology. Their value depends upon the fact that manners, habits, and instincts, follow the mode of obtaining, and the substances used for food, and the adaptation of teeth to these objects.

We are sorry Mr. Owen has not given us also an osteological comparison of different human subjects, for which he is undoubtedly as competent as any living anatomist. Although it might be more appropriate to a future part of this work, to furnish an osteological comparison of the negro and European, yet, having given those of the chimpanzee, orang, and man, we may as well introduce it here, and have them together.

The Canaanite differs osteologically from the

Shemite: 1. In having the cranium laterally compressed, elongated towards the front, retreating from the superciliary ridges, and smaller in proportion to the face. 2. In having the frontal and parietal bones less excavated, and less capacious. 3. The temporal ridge mounts higher, nearly to the top of the head. 4. The temporal *fossa* and *zygoma*, are larger, stronger, and more capacious. 5. The cheek bones project more, are stronger, broader, and thicker. 6. In the greater size of the orbits, particularly their external apertures. 7. The *ossa nasi* are more flat and short and run together above into an acute angle. 8. In the greater complications of the plates and winding of the *ethmoid* bone, and the cribriform lamella more extensive. 9. In the larger and stronger jaws, their alveolar portions, and included incisive teeth, projecting obliquely. 10. In the comparatively receding and rudimentary form of the chin. 11. In the more backward position of the *foramen magnum*, and occipital condyles. 12. In the greater thickness, density, hardness, and consequently weight of the whole skull, particularly the sides. 13. In the greater proportional length of the fore-arm. 14. In the narrowness and greater proportional length of the hand and fingers. 15. In generally having sesamoid bones, which are rare with Shemites. 16. In the greater proportional length and narrowness of the *pelvis*. 17. The *femur*, *tibia*, and *fibula*, are more convex, or gibbous. 18. In a peculiar articulation of the *femur* and *tibia*, by which the knees are in general thrown outwards. 19 In the *os calcis*, which, instead of forming an

arch with the tarsal bones, makes, with them, nearly a horizontal line, and consequently a flat sole of the foot.

We have furnished this latter comparison for the purpose of having them together, rather than for any benefit it will confer to enable us to ascertain the principle upon which zoologists determine species. It may be convenient for reference hereafter. Let us now return to our search after the principle which has practically governed zoologists in determining specific character.

There are several inferences to be drawn from the osteological comparison made by Mr. Owen to determine the specific character of the chimpanzee and orang, and the generic character of both of these from man. 1. That descent is not an item of investigation. It is an inference taken for granted, not required to be proved, and of course not even affirmed. The facts themselves, detailed to constitute specific character, are, on their face, evidence of difference of parentage. The constancy of nature in her productions may well be relied on, rather than the speculations of philosophers, however ingenious; and, if any one should undertake to question the fact of parentage, the proof lies on him to show it, by something more than mere conjecture. 2. Hybridity, or the sterility of offspring of the chimpanzee and orang is not a question made by Mr. Owen. It is highly probable these two creatures would, under certain circumstances, produce offspring, temporarily fertile, similar to the offspring of the European and Negro; because, so far as we

have any knowledge on the subject, we may say that any distinct species of animals may be made to cohabit, the progeny of which are more or less fertile, in proportion to proximity of natures of the parents. But although hybrid progeny may be produced, which may be temporarily fertile, an intermediate race is never permanently produced in this way, which we will endeavor to prove hereafter.

An important inference is to be drawn from the comparison of the chimpanzee and orang with the human subject. It is, that generic character is bestowed by the mere comparative enlargement of the maxillary bones, to furnish room for "the greater proportional development and different forms of the *cuspidati* and incisors." The greater development and outward projection of the alveolar processes, &c., are evidences of different functions, and consequently of different manners, habits, instincts, and intellectual powers, and are therefore correctly esteemed to be of too much importance to be consistent with identity of genus. These *cuspidati*, and the necessary arrangement for their production, are undoubtedly the strongest evidence of generic distinction of any of the twenty-one items; because they afford the strongest evidence of different natures. But although it is the strongest, it is not the only one of the number which bears on the subject; for the *os calcis*, the *hallux*, the *pelvis*, the *sacrum*, and the *vertebræ*, are all of generic value;—in other words, are inconsistent with such a similarity of natures which constitute specific distinctions only. It is not our object to determine what constitutes generic character;

but it is important to see the outside boundary of specific character, where it trenches upon generic, drawn by the first zoologist of the age, between subjects with which neither popular prejudice nor prepossession has an influence. Every one of the twenty-one items is cumulative proof of generic character; *a fortiori*, every one of them must be direct evidence of specific character at least. If each one is not positive evidence of specific character, we are at a loss to discover how they can prove a greater, when they do not prove a less. The application of this argument to our subject must be apparent, and will be made in its proper place.

Anatomy is the basis of physiology, and physiology is the basis of the character of organized nature: consequently, structure indicates function, which again indicates the manners, habits, and powers of organized life. Every variation in structure, therefore, however slight, must be attended by a corresponding variation of function, and a corresponding variation of the mode of action, the manners, habits, in short, all that we call the nature of the being. This is apparent in individuals of the same species of animals; and yet more apparent in the highest species of animals; because functions which influence psychical actions must depend upon a nicer adaptation of machinery, than such as influence instinctive actions. In every species of instinctive mammalia, for instance, there is a much greater uniformity in the manners, habits, and actions, of every individual, one compared with another, than there is in every individual of each species of man, who is a psychical mammal; and

yet we are not aware that individuals of instinctive mammalia, of the same species, differ more or less in their structures or functions from each other, than do men of the same species. All lions, zebras, &c., are more alike in their habits and instincts, than all Europeans are alike in their habits and intellectual powers. In the instinctive mammalia a slight difference of structure may not be attended with a very important difference of functions, and consequently of habits and powers; and yet we see, in Mr. Owen's osteological comparison of the chimpanzee and orang, that he considered "the non-division of the pisiform bone of the wrist," and the general absence of "the unequal *phalanx* and nail" of the great toe, of sufficient importance to establish specific differences. Nay even where they agree in the parts, the "breadth," "size," "length," and proportions, constitute items of importance to exhibit functions, and through them manners and habits. Mr. Ogilby in his "Observations on the Opposable Power of the Thumb in certain *Mammals*, considered as a zoological character," contained in the "Proceedings of the Zoological Society of London" for 1836, gives a new name to mammals possessing hands, and a new division or classification of the genera of the order, founded upon the presence, or absence of thumbs. Mammals with opposable thumbs on the anterior extremities only, he calls *Bimana;* those with opposable thumbs on the four extremities he calls *Quadrumana;* and those with opposable thumbs on the posterior extremities only, he calls *Pedimana.* He says that, by the presence or ab-

sence of thumbs, "zoologists obtain a far more important character by which to distinguish the monkeys of the old and new world than that hitherto relied on, *the comparative thickness of the septum narium, or than the accessory aids afforded by the absence of cheek pouches and callosities.*" Hence the mere power of using a member in a particular way, constitutes an anatomical and functional difference sufficient to distinguish genera; for it is not that the limb is wholly absent,—that they have but four instead of five fingers; but the "anterior thumbs (using the ordinary expression for them) are placed absolutely *on the same line* with the other fingers, are of the same form with them, act invariably in the same direction, and are totally incapable of being opposed to them."

In the highest class of animals, the psychical mammalia, in whom mere temperament constitutes an immense difference in their modes of action and powers, it would be reasonable to suppose that the slightest structural difference would be of far more importance than a similar structural difference in the instinctive kingdom. What we ask, was the anatomical structure peculiar to a Bacon and Newton to distinguish them from millions of their species, from whom they were distinguished by the possession of such amazing powers? If their frames were submitted to an Owen, together with thousands of frames of their fellow species, from whom they were so eminently distinguished, he could not point to a single difference in their organizations to denote their superior powers; and yet, if there were a race of men,

of whom Bacon and Newton were the representatives of the fair average of intellectual capacity, would we hesitate to acknowledge them to be a distinct species, far above the ordinary standard of our race? If we descend to the lowest order of animal, the radiata for example, species, genera, orders, and classes, are established upon minute differences perfectly appropriate to such beings; but in the higher orders of animals similar differences are inadmissable to establish zoological character, because they do not equally represent functions, and consequently habits and instincts. If polypi and infusoria form one extreme of animated nature, certainly man forms the other; and if function is indicated by *tentacula* and *cilia*, in regard to number, arrangement, &c., in these lowest orders of animals, why may it not be indicated by slighter organic differences in psychical, than in instinctive mammalia? It has never been claimed for them; nor do we claim that any different principle shall be used to classify man, than what has been applied to the whole of the instinctive mammalia. If the principle should be changed, however, we claim that it should be more stringent, not more lax;—that is, require less differences anatomically, not more, as has been acted upon by all authors who advocate the unity of the human species; because psychical functions, or powers, may be immensely influenced by very slight anatomical differences, the like of which would produce no effect upon instinctive beings inconsistent with identity of species; so slight as to be scarcely appreciable by the anatomist; and yet confer a character

upon the beings more widely different, in every respect, than all the thumbs, tails, cheek pouches, and callosities in the monkey family. But although we might fairly ask for the application of such a principle to our subject, yet we ask nothing more than the common principle universally applied, by zoologists, to the classification of other mammalia; —and not the principle which, after enumerating immense anatomical and functional differences, disregards them all because they "pass by imperceptible gradations into the opposite character,"—a principle which, if acknowledged and acted upon in zoology, would make the whole animal kingdom but of one species; for "the nice dependences" of species upon species, genus upon genus, order upon order, and class upon class, pervade all nature from man to the zoophyte, and from this to the lichen.

It may expedite our business, in this stage of it, to give a definition of species, and follow it by a critical examination of its parts, and an illustration, by examples, from zoologists.

Species, then, is a constitutional organization, in a race of animals, producing a similarity of functions, in which they agree with all animals of the same genus, in generic character, but differ from races of the same genus in modifications of generic character, in regard to form, color, instincts, or intellectual power, and which we have good reason to believe to be permanently native in the race.

We call it "a constitutional organization"—because what is constitutional is transmitted by generation, as a general rule; and nothing that is not

constitutional is permanent by generation. It is also an "organization,"—that is, a construction of the parts of the system in reference to determined functions. "Constitutional organization," therefore, signifies a permanent condition of the body, by the construction of the parts of the system in reference to determined functions.

Constitutional organization is the basis of zoological classification. It pervades it from the beginning to the end; from the first divisions of animals into vertebrated, molluscous, articulated, and radiated, through every descending series to the last ending in species. It is, therefore, an essential element in the definition of every one of the series.

The next member of the definition is, "in a race of animals;"—that is, a family, or generation, both ascending and descending. By the use of this word "race," we gain the advantage of parentage and descent, without the necessity of proving derivation from a single pair. No zoologist has attempted such a thing in classification. The origin of being is neither affirmed nor denied. Animals are described as they are found, according to the laws now applicable to them, without involving the subject in abstract discussions about origin. We know not how far descent from the same ancestors, at some remote period, would affect zoological classification. Suppose it could be proved that, at the creation, God only made a pair of each genus of animals, from which have sprung, by the operation of natural laws then active, but long since repealed, or inoperative, all the varieties of species which

now adorn the world; nay, suppose developists should prove that all animated beings originated from a single pair of *acari*, generated by electricity acting upon a solution containing carbon, and the other elements necessary to produce gelatine; and from these proceeded, by a regular series of transmutations, all the animal furniture of the world, from polypi to man. We say we do not know how far such facts would affect zoological classification; because no zoologist has been perplexed by such speculations, but in regard to the natural history of man. But we apprehend such facts would be replied to, by acknowledging them to have prevailed in the beginning; but that the laws then applicable to organisms, have been inoperative for at least 3,500 years; for history, and other incontrovertible evidences, prove that no such transmutations have taken place for this period: consequently the zoologist would admit that his science would be inapplicable to a state of things so extraordinary as the time when the laws of transmutation were in activity. But he would also claim for his science full credit, and be entitled to the highest belief, for classifying animals since the repeal of that law;—not only for the period which can be proved by sacred and profane history, but for the whole period of geological history, lithographed by the Almighty on the pages composing the folds of the earth.

Our next clause is, "producing a similarity of functions." We say "a similarity," not an identity; for no two individuals of any species are identically alike. Individually, something to characterize every

individual being of the world, one from another, is one of the most wonderful, as well as benevolent laws of the Creator. Strange, indeed, is it, that the small circle of individuality, of thousands of millions of isolations, should nevertheless group into specific families, again as rigidly isolated;—and again into generic families, yet isolated;—again into orders, classes, and divisions,—but remain as perfectly isolated in all of these groups, as each is in his individual being. Nor is it in the power of the whole organic kingdom, to break down the barriers of any of these isolations, any more than it is in the power of an individual of any species to sink his individuality in another. This constitutes the basis of natural classification in zoology. What, then, becomes of the doctrine of congenital varieties, accidental births?

"Producing a similarity of functions." We use the word "functions" in its largest sense, embracing every action relating to vital phenomena, and the animal actions induced by them. The functions of the lion secrete matter for his carnivorous teeth, his five toes armed with formidable retractile talons, prompt his desire for flesh, and his mode for gratifying it; while the functions of the ox secrete no matter for carnivorous teeth, for five toes with talons, no desire for flesh, and therefore furnish no mode of gratifying such an appetite. The functions of the leopard give him his spots, while those of the zebra give him his stripes. The word functions, therefore, indicates form, color, sensation, manners,

habits, instincts, intellectual power—in short, everything which relates to zoological classification.

The next clause is, "in which they agree with all animals of the same genus, in generic character." If they do not agree in this respect, they cannot in any other less matter, for the simple reason that the greater always contains the less: consequently, species are contained in genera, and specific differences can only commence after this point is passed.

Thus far our definition proceeds to define the agreements which constitute identity of species; it now commences to state the disagreements which constitute specific differences. The definition therefore proceeds—"but differ from races of the same genus, in modifications of generic character in regard to form, color, instincts, or intellectual power." First, different species must be of the same genus, otherwise they are not only specifically, but generically different; but specific differences arise from "modifications of generic character," not from positive differences in this respect; or, at least, not such as are of generic value.

The first modification we have mentioned is that of "form." The orang furnishes a striking example of the influence of form to constitute species. In youth this animal exhibits an elevation and general rotundity of cranium, which induced Cuvier to place him before the chimpanzee in his *règne animal;* but all these characters change remarkably in the adult animal. In this state the orang acquires a remarkably flat and retiring forehead, a great develop-

ment of the super-orbital and occipital crests, great prominence of jaws, great development of the *cuspidati*;—in short, the whole head acquires the form and character of a large carnivorous animal. Before it was known that these remarkable changes occurred in the same animal, at different periods, it was considered that these different forms exhibited two distinct species of orangs; and it has only been by the discovery of the fact, that these contrasts only indicate immaturity or maturity of the same animal, that it has been abandoned. But a difference of form, if uniform and constant, and especially, if at all considerable, is more frequently of generic, than specific value. It is only when it is comparatively slight, and accompanied by slight osteological and functional differences, that it confers specific distinction alone. The value of form, in zoological classification, will be immediately perceived by the general reader, if he should reflect that it is always the best means, adopted by the Creator, for an end; consequently, animals of different forms cannot be equally well adapted for the attainment of the same object, by the same means, and are consequently not of the same species, if of the same genus.

Color is always of specific value, when it is uniform and constant. It depends on the functions of the animal. Color is produced by the absorption or reflection of particular rays of light; a body, therefore, which absorbs rays of light, must be different in its functions, or quality, from another which reflects the same rays. Therefore, color more frequently forms a specific characteristic than almost

any other circumstance. In De Kay's Natural History of New York, class mammalia, the importance of form, for generic, and of color, for specific characters may be readily seen. As, for example, in the squirrel family, the following is the generic character, p. 57. "Body elongated. Eyes large. Ears erect. Upper lip divided. Posterior extremities longer than the anterior, which have four long distinct toes, and a tubercle covered with an obtuse nail in place of a thumb. Eight teats; two pectoral, the remainder ventral. Tail long, with long bushy hair, often distichous or directed laterally."

Form, it is perceived, constitutes generic character. He then proceeds to give the specific characteristics of this genus, from which we will only extract two, from which it will appear that color is the most important item. First. "The little grey squirrel—Sciurus leucotis." "Characteristics. Grey above; lighter beneath; sides of head and legs tinged with rufous. Ears not pencilled, soiled whitish behind. Tail rather longer than the head and body, edged with white. Length 15. 0."

Second. "The black squirrel. Sciurus niger." "Characteristics. Entirely glossy black; a shade lighter beneath. Claws covered with hair. Hind-legs with a few scattering hairs beneath. Length 12. 0—14. 0."

When a species is variable in its color, the various markings are noticed. This is the case with the "little grey squirrel," above mentioned, which is noticed by Mr. De Kay, as follows—"Color. This is subject to great variations, depending upon age

and season; but the following may be considered as tolerably constant: Above, bluish grey. Chin, throat, and all beneath, white. The sides of the head and ears, the flanks, anterior part of the fore-legs, and the sides of the hind-legs of a ferruginous or fawn color of various shades of intensity, generally most conspicuous on the hind-legs. Frequently on the lower part of the cheeks a bright fulvous spot, and occasionally an obscure stripe of brown on the back, reaching to the base of the tail. Tail edged with whitish."

When color alone constitutes the specific characteristic, it sometimes creates confusion. This happened with the little grey and black squirrels; for "the dark brown or black variety of the little grey squirrel has also been described as the *niger*," and, ultimately, the black squirrel, as a distinct species, was suppressed; but "Harlan, Godman, and Richardson, have very properly restored it to its place in the systems." The question, in this controversy and decision, was not, whether the color of these two squirrels did, or did not "pass by imperceptible gradations into" each other, as has been contended for by naturalists describing the human species; but whether the respective colors were permanent and uniform, and were therefore characteristics of different animals, or not.

The sloth, or ai (Bradypus, Illiger) is another decided example in point. Of this singular animal there are two undoubtedly distinct and well settled species, viz., the common sloth (Bradypus communis), and the collared sloth (Bradypus collaris),

the chief difference being a large black band, or collar, which completely surrounds the neck of the one, and not the other. There are some other differences, which, however, except the structure of the crania, chiefly relate to color.

But it is unnecessary to multiply examples of the importance of color in specific distinctions. Every zoological work abounds in them; and, when constant, none, singly, is of greater specific value. It is the only one which is peculiarly and exclusively specific; for all the others enter, more or less, to constitute higher denominations in classification, and are only specific when they are too slight to be of generic value. It is true it is not always an infallible guide; but this arises from imperfect knowledge, not the uncertainty of the characteristic. A few animals are variable in color, some of which are known, and others unknown. When the variations are known, they occasion very little difficulty; but when they are unknown, they sometimes occasion difficulties, which are remedied by a more perfect acquaintance with the animals, an instance of which we gave in the little grey squirrel and the black. In a vast majority of zoological subjects no difficulty in this respect is experienced, because there are comparatively few that are variable. Besides, the liability to error by this characteristic, is no greater than by that of any other that is ordinarily considered conclusive; for there is scarcely one of them less variable than that of color. Even in the higher denominations some uncertainty attends the characteristics. Mr. De Kay, in his "New York

Fauna," after giving the characteristics of the "class mammalia," remarks:—"The characters assigned to this class are sufficiently distinctive; and yet, with the single exception of suckling their young, none are absolute or invariable. Thus in the *manis* and *armadillo* of South America, the body is covered with scales; in the *manatus* of Florida, there are but two feet; and these in the *whales, porpoises*, &c., are reduced to the shape and functions of fins. In the totality of characters, however, we obtain a correct idea of the class under consideration." Natural History of New York. Part I. The "New York Fauna," p. 1.

It thus appears that the characteristics which define the class, have no greater certainty than those which define species. But Mr. De Kay has not mentioned, though he intimates, the widest deviations from the character of the class mammalia, for there are at least two mammals ("*monotrema* of Cuvier,") the ornithorhinchus and echidna, which are oviparous; and, as if the Creator designed to exercise the ingenuity of naturalists, and exhibit the links and gradations of beings, the whole marsupial order occupies the middle ground between oviparous and viviparous mammalia. The exclusion of their immature young can scarcely be called a birth; for the perfect animals issue from the *marsupium* long afterwards. And yet, it is a more perfect birth than the exclusion of an egg, though less perfect than that of most animals of the class. A rigidly natural classification might require the instinctive section of

the class mammalia, to be divided into three subsections, viz., *viviparous*, *fœtiparous*, and *oviparous*.

The same difficulties attend other denominations of classification, as orders, and genera; but although these are acknowledged imperfections in the science of zoology, yet, being only exceptions to the universality of its principles, they conclusively prove its general principles to be correct. Exceptions prove a rule. So is it, precisely, in regard to the value of color to ascertain species. In a very few instances it has led to errors, which are soon corrected by the extension of knowledge. But in the human family it neither can, nor has led to any error; for if instances of variation have arisen, in which individuals of one species have assumed the characteristics of another, they are so rare that no confusion can possibly arise from them. We do not know a single generic family of animals, the species of which are more constant and uniform in their colors than the several species of men. The lion is not more regularly tawny, the tiger more regularly streaked, nor the leopard more regularly spotted, than the several races of men are uniformly distinguished from each other by their colors. But whatever opinion might be entertained, if color alone were relied on to support specific differences in the human family, yet, when supported by anatomical, physiological, and psychical differences, its value is immeasurably enhanced, and irresistibly enforced.

We have devoted more space to color than some may think it required; but it must be remembered that it has been lightly regarded by many naturalists

in the history of man, which imposed upon us a necessity to exhibit its value.

Instincts pervade every denomination of classification, from the highest to the lowest, being the special objects indicated by all of the characteristics in the whole series. The manners, habits, and actions—in a word, the whole mode of life of animals—proceed from their instincts; consequently classification has been constructed in direct reference to them. The class mammalia, therefore, is founded not only upon the possession of proper organs by the adult animal, but also upon the fact that the young of these animals instinctively draw their nourishment from mammæ; for in vain would these organs be provided, if the young had to be taught the process of sucking, without having a natural aptitude for it. We apprehend that not one in many thousands, if in the whole class, could be taught the process in time to save life. The characteristics of orders also indicate instincts; for carnivora, rodentia, edentata, &c., indicate the mode of life of the respective families. So also do those of genera and species. All of them indicate instincts corresponding in magnitude with the ascending or descending series; but the great object of all classification is to arrive ultimately at the more minute and accurate knowledge existing in specific differences; differences which, as they regard the animals themselves and their relations to man, are of as much, and often of more importance than the distinctions of higher denominations. Specific characteristics must necessarily be slight to human view,

compared with the more prominent and easily distinguished characteristics of the higher series. Anatomically it consists of less or more of the same parts; as the comparative shape, size, thickness, or weight of the skull, limbs, bones, ligaments, muscles, nerves, glands, viscera, or cutaneous structure. Physiologically it consists in the modification of the laws of life, or functions of the beings, produced by these modifications of structure; which are generally more strikingly manifested by color, sometimes accompanied by modified texture of the hair, or the manners, habits, size, or power of the animals; sometimes accompanied by hostility, but generally by sexual aversion of different species, although nearly allied. As, for instance, in the squirrel family; the little grey, fox, and black squirrels, have frequently been confounded together; but the hostility between them is such that they never meet without strife, and never abide together in the same location. The little grey squirrel sometimes, but seldom, becomes black; but the black squirrel never becomes grey. Thus we have three distinct species of animals of the same forms, habits, actions, and modes of life, with difficulty distinguished by their colors, yet only distinguished by them, by size, and their natural hostility. We may lay down the broad principle, that every difference of form, color, manners, habits, and modes of life of animals, if *permanent in the respective races*, is of specific value. Of course, when two or more of these differences are present, the separation becomes more distinct. When the slightest of these differences is combined with ascertained anatomical

differences, equally permanent, especially of the skull and jaws, no doubt is entertained of the distinction of species; as in the example of the sloths already mentioned; and as may be seen in the specific characteristics of the several species of monkeys, or any other family of animals.

Intellectual power in man is the equivalent for instinctive power in animals. Man has instincts; but by far the larger number of his actions are the result of mental operations, and not of instinct. If man were zoologically classed by his instincts he would be the lowest in the class mammalia, instead of the first. The whole order of zoological classification would be destroyed; and might it not be, that the bee, the ant, or the spider, would occupy the place now occupied by man as the standard of creation? What is it that bestows on man the position of a standard for organic nature? Not his encephalos and its appendages, merely as a mass of cerebral matter, with its singular and intricate arrangement; but because the intellect acquired by his organization, gives him a power infinitely superior to any other creature. We say "by his organization," instead of the spirit of the Creator breathed in him, to make him "a living soul," to conform to the requirements of some naturalists, who will not admit spiritual distinctions as zoological characteristics. But what is instinct? Can it be seen, handled, or disclosed by the knife, better than reason? Anatomy never exhibited it; and yet zoologists always class animals, without hesitation, according to its manifestations. The fox is a solitary, and the wolf a

gregarious animal; and if there were no other difference between them, this alone would make them of distinct species. From known facts in the history of animals, and an ascertained conformity of organic structure to these facts, anatomy now informs us, that a certain structure is invariably followed by certain instincts. If the anatomist could disclose instinct by his knife, without previous knowledge obtained from observation, why did he not tell us that the sloth, instead of living *upon* the limbs of trees, actually lives *under* them; and that, instead of being a sloth in his pendent position, we "would never think of calling him sloth," if seen traversing the woods when the wind blows? Now that we know the habits of this animal we admire the wisdom of his structure, as a means adapted to an end; and if another, of a similar structure, should be discovered, the comparative anatomist will have no difficulty in describing his mode of life; for the structure of the sloth is so admirable for, and so strikingly adapted to, his mode of progression, that a mistake could scarcely be made. Instinct, therefore, so far as it depends upon any thing exhibited by the anatomist, has no greater title to zoological consideration than intellect. That it is more simple in its operations is no argument in its favor; for, we apprehend, zoologists will not acknowledge that the characteristics of man are too intricate and difficult for comprehension and classification. If so, exscind him from the science, as a being not belonging to the animal kingdom. If his distinctive characteristics are not to be used to describe him, why attempt

to describe him? And what peculiar characteristics does he possess, but his mind?

Instincts are the bases of zoological classification, because all animals but man are exclusively governed by them; but must man, because he is not governed by instincts, be classed by them? If instincts,—in other words, manners, habits, and modes of life,—are the great objects and results of zoology in regard to instinctive creatures, shall not the mind which is the equivalent for instinct in the human family, which influences the manners, habits, and modes of life, of human beings, be the great object of zoology in regard to man?

If we survey the great family of mankind, what do we behold? Not only a most singular geographical separation of several great families into distinct habitats; not only permanent distinctions of color and organization; not only aversions to intermarriages; but different sexual relations, different religions, different governments, different modes of life, manners, habits, and intellectual power. All of these differences have prevailed from their earliest histories and continue without alteration. Compare, for instance, the people of Great Britain, with a population of 22,000,000, with the most favorable example of the dark races, the Chinese, with a population of 300,000,000. What has enabled these Islanders to dictate terms to a nation containing nearly one third of mankind? What enabled them to chastise them at their own doors, ten thousand miles from their own homes? Intellect.—To the Chinese this must have appeared astonishing; but to us, who

know the secret of power; who know that Great Britain, with her small population, by means of her giant intellect, actually performs the labor of a population equal to that of all the people of the world, if every man, woman, and child, were adult able-bodied laborers, so far from being a matter of surprise, the result was a matter of course. China, with 300,000,000 stereotyped Confucians, could not contend with Great Britain with her 900,000,000 of Bacons and Newtons. This immense disparity of intellect is not only displayed by Great Britain in comparison with China; for, although in them we have contrasted the most favorable examples of the white and dark races, the contrast will be equally strong if we compare the whole Shemitic family with any one, or all of the dark races. Nor do the contrasts stop here. Compare the Ishmaelites with the Japhethites, or either of these with the Canaanites, and the differences of manners, habits, mode of living, and intellectual power, are quite as strong, nay stronger, than those which distinguish the species of most genera of animals. Take, for example, the Simiæ family, in which it will be difficult to find the species which compose any of its genera, more strongly contrasted than are the four species of men. Nay it will be found that genera are separated by distinctions of less value than prevail between them. The genera *Pithecia* and *Callithrix* are separated only because the first has a *bushy*, and the last a prehensile tail. Nor are we confined to a single family; for the same thing may be observed in the *Mustelidæ*, *Sciuridæ*, &c. Let it not be attempted to be proved, by indi-

viduals of any one of the human species, from particular, trained examples, that there is a capability in the several races of men for improvement; for if there were no such capability they would not be human, as a capability of progressive improvement is an essential characteristic of the class of psychical mammalia. If they had not this capability they would be turned over to the instinctive mammalia. The question is not about capability, nor about individuals trained by the industry and example of another species; but it is, What they are by their own efforts, in their own homes, in mass;—what is the standard of their race? What are they naturally, without controlling influences, which only operate partially, and are extinguished in the individuals subject to them?

It may be proper to take a rapid glance at the psychical condition of the several species of men, for the purpose of seeing whether the differences are not as great as generally form the foundation of specific differences in zoology. In a subsequent chapter we will furnish the particulars more at large. What then is the psychical condition of the Shemitic people? The individuality of woman, her personality, her equality of rights, fully acknowledged, and established; governments established, and laws enacted securing the rights of the governors and governed; a religion established, which, whatever sceptics may say about its divine origin, is more consistent with the character of the Creator than any other; the intercourse of nations so rapid, free, and untrammeled, that every Shemitic nation seems to

be hastening towards a great democracy of the whole family; agriculture in such perfection that the necessaries and luxuries of life are so abundant, that every prudent laborer may live as sumptuously as a prince of old times; railroads, bridges, and turnpikes ramify the whole geographic body, as do the arteries and veins of the animal body, bestowing a like warmth and vitality: light-houses built; electricity controlled, conducted, and made a common messenger, for ordinary occasions; steam compelled to labor for all purposes; the age of the earth scrutinized, the rocks analyzed and classed, and the organisms of a former world discovered, classed, and their natures ascertained; all the organisms of the present world so classified and arranged by naturalists, that a new specimen is immediately placed without confusion or disorder; chemistry so far perfected that the globe, and all its furniture, are known to consist of but few elements, which are yet tortured to disclose their elementary constituents; astronomy so systematized that a new planet is discovered, and its place in the heavens told by figures; and lastly, all the arts which can contribute to the comforts and conveniences of life improved proportionably with the improvements of science.

We must not omit to mention the peculiar migratory trait of character of the Shemites, which is as distinctive as any other. We do not allude to the conquest and occupation of countries by armies, in which respect the Ishmaelites may have been as successful as the Shemites; but to the establishment of colonies for peaceful purposes, in which no species

but the Shemitic, or rather Hamo-Shemitic has been engaged. The principle was manifested at the very earliest period of which we have any knowledge of the respective species. The Phœnicians were early and actively engaged in this operation. The Greeks and Romans also practised it; but it was reserved for modern times to exhibit the perfect development of this principle of the Shemitic character. Before the discovery of the polarity of the needle, the Shemites were restrained by the mode of navigation, and the subjection of their commerce to the Ishmaelites. But the moment they were relieved from these restraints, their colonizing spirit manifested itself surprisingly. Equatorial Africa, India, and America, were thus settled: and now we perceive nuclei of Shemites scattered over every quarter of the globe; over islands and continents; continually increasing in size and power, while the aborigines are vanishing by the operation of silent, efficient, but natural causes. To such an extent is this principle operating, that the melancholy reflection can scarcely be resisted, that the dark races are doomed to extinction by the gradual increase of the white race, by a process similar to that which is now fast extinguishing the aborigines of North America. The period has probably now arrived which will decide the fate of the dark races for ever! Their destiny has arrived at a crisis; and philanthropy could scarcely engage in a more noble project, than to avert from them, if possible, the extinction with which they are threatened by the Shemitic colonial settlements among them. No dark race has

at any time exhibited this propensity. Extensive, destructive, desolating, and debasing have been their wars and conquests; their armies have occupied countries, and enslaved nations; they have destroyed nations by fire and sword, but never by substitution; for the fruits of conquests, by colonies, they have never reaped.

It may be said that the dark races are not so eminently mercantile, and are not influenced by the same spirit of enterprise. We grant it; but this is precisely the thing we desire to prove,—that they are not influenced by the same strenuous temperament, the same genius, the same nature, and are, therefore, not of the same species; for, if they were, they would be as commercial, as enterprising, as scientific; in short, equal in every respect.

What is the psychical condition of the Japhethic species? Woman has no individuality, no personality, no equality of rights. She is a slave, an article of merchandise; the government is absolute, despotic, but patriarchal; their religion is idolatrous, and an engine of state; their laws sanguinary, vindictive, and sumptuary; intercourse with other nations forbidden, or only partially permitted; agriculture generally highly cultivated by the labor bestowed upon it, rather than by the art displayed in it; a considerable advance made in the useful arts, but very little in the sciences; the science of numbers only rudimentary, and therefore all the sciences depending on it of the same nature; and lastly all the arts which contribute to the comforts and conveniences of life are stationary, and have been for ages.

The psychical condition of the Ishmaelites varies from, but, on the whole, is not in advance of, the preceding species. Woman is equally a slave, an article of merchandise, and, if anything, more oppressed; governments, in tribes patriarchal, and in nations absolute, but in all despotic; religion fanatical and sensual; the intercourse of other nations, although not forbidden, is not courted, and is attended by danger, unless awed by power; the general character of the people nomadic, rather than agricultural; inferior to the Japhethic species in the useful arts, but superior to them in sciences, which are, nevertheless, only elementary; and, lastly, the arts which contribute to the conveniences and comforts of life, less advanced than they are among the Japhethites, and also stationary, and have been for ages.

The psychical condition of the Canaanites is so low that we scarcely know how to describe it. When we say that their women are in the most abject condition, and that their governments, laws, religion, arts, sciences, agriculture, comforts, and conveniences of life, are fairly represented by them, it is sufficiently accurate to answer our object.

We have thus given a general outline of the psychical condition of the different species of men; from which it appears that each species is characterized by as wide a difference of psychical power, and consequently of manners, habits, and modes of life, as usually distinguish different species of animals. Some may attempt to account for these differences by education, governments, &c., subjects which we

have elsewhere discussed; but zoology has nothing to do with the causes which produce differences, if they act constantly and invariably in the same way. The causes, whatever they are, operated in full force anterior to profane history, and have never since varied; consequently the naturalist may fairly take it for granted that they are natural causes, until the contrary is proved by something more than a mere speculation, a presumption, that they are accidental. If the naturalist were compelled to account for all of the causes which separate the species of generic families in zoology, he would be obliged to abandon the science; for who could positively prove that the manners, habits, in short, the various instincts of the species of any generic family—the monkeys, bats, squirrels, weasels, &c., were not accidentally produced by the force of circumstances? Is man the only subject of zoology, in regard to whom the speculations of ingenious men are to supersede the well settled principles of the science? And yet, in regard to man, the evidence is clearer, stronger, and for a longer period, than it is in regard to most of the subjects of natural history, about which there is not the slightest difference of opinion. But, as we have said, we have elsewhere attempted to show, that these psychical differences necessarily and naturally follow the peculiar organization of the different races; and will, therefore, proceed to the last clause of our definition, viz.:—

"And which we have good reason to believe to be permanently native in the race." That characteristics must "be permanently native in the race,"

is freely admitted as an essential of species; the only question, therefore, is in regard to the nature of the proof required to establish it. Although the essentials of evidence are the same in all sciences, yet each one has a more or less rigid application of these essential principles according to rules peculiar to itself. In figures, absolute demonstration is required. Chemistry, too, requires absolute proof, by analysis or synthesis. In legal courts positive proof is required, when, from the nature of the case, it can be had; but in other cases, circumstantial evidence is admitted, which is entitled to greater, or less weight, according to the strength of probability. This kind of proof we suppose to be applicable to zoology, with this difference, viz.;—that, in human tribunals, circumstantial evidence is communicated by a human witness, and necessarily partakes of the infirmities of the individual who deposes; whereas natural laws testify in their proper persons, and are not subject to human infirmities. Consequently, all the proof offered in a natural court, if it fall within the scope of the natural law designed to be enforced, is of a higher and more reliable character than mere human proof in a human tribunal. The natural law applicable to the subject we are discussing, is, that, throughout animate creation, structure and functions are means adapted to ends; and that the slightest modification of them is attended by a corresponding modification of instinct, mode of life, or intellectual power. The constancy of nature in all of her operations, whether relating to organic or inorganic creatures; and that she never deviates

from a certain structure, or composition, permanently, without designing to adapt such change for another object or end, are facts upon which all the natural sciences are constructed. We say the "slightest modification;" because although zoology does not recognise those slight modifications of structure and function, which constitute individuality in every species, yet they are manifest in every individual, in the appearance, the manners, habits, and intellectual power. This difference extends even to the odor of the individuals, by which even the human nose can distinguish the several races of men; and the more acute nose of a dog will unerringly trace his master's steps, among millions of human beings of his own species. Zoology, however, descends no lower than species in classification; for although varieties are frequently noticed by naturalists, which are very proper to denote the fact, that the species is subject to variations of color, size, or habits; yet we have no idea of *permanent* varieties, not amounting to specific differences. The idea inseparably connected with varieties is, that they are not permanent, that they return to their original types, sooner or later. We do not know of any animals permanently distinct from others in manners, form, or color, which we have reason to believe have been derived from the same original stock.

Permanency, therefore, is an essential element of species, as, also, of all higher denominations. What shall amount to proof of this fact? If the proof should be sufficient to raise a *probable presumption* of

permanency, it is sufficient to throw the burden of proof to the contrary on those who contest it. Such, for instance, as a trifling difference of color alone, of animals of the same habitats and modes of life, unaccompanied by anatomical differences, the evidence of permanency should be stronger than if the animals had not the same habitats, or were of different habits, or organizations. For this reason the species of some of the *gibbons* can scarcely be said to be well settled, although they are admitted in classification; but although the distinction of some of them is only characterized by color, if future observation should confirm the permanent differences in this respect, the question will be definitively settled. But if these apes also differed in structure and functions, the proof would be amply sufficient to establish the specific differences without further observation. If, besides the difference of color, one had long black, strong hair; another short, crisp, knotted, black hair; and another soft, thick, long or curled light hair; and they all differed in the features of the face, nose, jaws, eyes, shape of the skull, integuments, limbs, and also in their instincts, manners, and habits, who would entertain a doubt of their specific differences at least? And yet more, if all of these differences were known to have prevailed for nearly 4000 years, without the slightest known variation, what further proof would zoology require? Would it not extend beyond the ordinary requirements of zoology, to the more rigid requirements of legal courts? So far, therefore, as it regards the question we are discussing, it can scarcely be

said to be a matter of any importance, whether the rigid rules of judicial evidence, or the more lax, but sufficiently exact rules of zoological evidence, should be demanded from us.

We have already furnished several examples of the nature of the proof required to establish permanency of specific differences. We may sum up the nature of the proof admissible in this branch of our subject as follows, viz.:

First—*Probable presumption* of specific differences are inferred, to a degree sufficient to throw the *onus probandi* to the contrary on those who dispute it, from the fact of different colors prevailing between animals. This probability may be much strengthened, or rather leans to a *violent presumption*, if the animals have different habitats, although their dispositions and habits of life should be similar. As, for instance, the two species of howler, or preacher monkeys (*genus Aluatta*), the *Seniculus* is red, and the *Belzeebul* black. Their manners, dispositions, and habits are so similar, that some persons supposed them to be only varieties of the same animal; but one inhabits Brazil and the other Guiana, which has materially strengthened the inference from color, which had been weakened by the identity of manners and dispositions.

Secondly—*Violent presumption*, which is often equivalent to positive proof of specific differences, arises from any of the following facts. First—Anatomical, or physiological differences, without difference of color, when they relate to any important structure or functions; as the skull, the jaws, limbs,

&c., which influence manners, habits, and dispositions; but slight differences, in these respects, are of specific value, if they are absolute and invariable, especially if accompanied by different markings, or texture, or direction of the hair. The common and collared sloths, before mentioned, are an example to the point.

Thirdly—Uniform hostility, with, or without a difference of color, as in the example of the little grey, fox, and black squirrels.

Fourthly—Sexual aversions, with, or without differences of color, or habits; as between the hare (*Lepus timidus*) and the rabbit (*Lepus cuniculus*). The distinction of habits cannot always be relied upon in respect to these animals; for though the rabbit will generally, yet he does not always, burrow.

Lastly—*Positive proof* of specific distinction is afforded by differences of manners, habits, and dispositions; that is, modifications of instinct, or, its equivalent, intellectual power. If these should be accompanied by many of the items constituting violent presumptive proof, which are known to have prevailed for an indefinite antecedent period, the fact is established beyond controversy.

We will now endeavor to apply the principles we have obtained by our definition to our subject, which we will do by following the method we adopted to analyze the definition, and applying the several clauses to the different human species.

"Species then is a constitutional organization." There is a regular descending series of organization

from the Shemite to the Canaanite. In a previous part of this chapter we furnished the comparative osteology of the Canaanite with the Shemite, by which the wide difference of constitutional organization between them may be seen at a glance. Nor are the differences of bony structure, great as they are, the most important differences of "constitutional organization" of specific value; for the hair, and cutaneous structure, the latter of which so importantly modifies the functions and powers of the beings, besides imparting color, are, in an especial manner, specific characteristics. In the ascent from the Canaanites, the Japhethites are the next in the series, as they approach the Canaanites by their physical characteristics, as the Ishmaelites do the Shemites. In their low and slanting forehead; their broad and depressed root of the nose and glabella; small nasal bones and wide expansion of the wings of the nostrils; their thick lips, medium prominence of the chin, and scarcity of beard; in their breadth of the suborbital part of the face, obtuse prominence of the jaws, and outward expansion of the cheek bones, they evidently approach the Canaanitic formation. But, on the other hand, in the greater breadth and square form of the skull and whole visage, and in the oblique position of the orbits, they are peculiarly and exclusively Japhethic.

The Ishmaelites approach the Shemites in the development, and more globular form of the skull; in the prominence of the glabella and nasal bones; in the perpendicularity of the alveolar margins of the jaws and the general oval shape of the face. On

the other hand they recede from the Shemites in having a smaller frame and limbs; longer, sharper visage; in a less developed and more receding forehead and more receding chin; a greater proportional development of malar bones; and in the nature of their integuments.

These "constitutional organizations" have prevailed from the earliest period, without having undergone any material alterations; time enough, surely, conclusively to prove them to be native in the races. Some functional changes have taken place, particularly among the Shemites; but they have only been in degree, not in kind. The same peculiar traits of character have remained unaltered, although modified; but all the dark races have remained comparatively stationary, from the earliest period.

All the races of men agree "in generic character." The characteristics of the respective races are only differences of specific, not of generic value: yet we think, it would be more difficult to establish this fact conclusively, upon strictly zoological principles, than to establish specific differences only. When we regard the vast disparities of psychical power of the different races of men, in conjunction with their anatomical and physiological differences, and the consequent diversities of manners, habits, and modes of life; when we look at the sexual and social relations of the different races; the almost instinctive condition of one race; the semi-civilized, but stationary and passive condition of another; the semi-civilized, stationary, but nomadic and predatory con-

dition of a third; the highly civilized and rapidly progressive condition of another;—and then compare them with the differences which constitute genera, and sub-genera, of different zoological families, we might experience some difficulty, upon zoological principles, to find sound arguments to maintain the generic identity of the human family. The ape (Pithecus) family, for instance, is composed of animals having the same dentition, the same organs of sense, the same physical formations, the same habitats, manners of life, and modes of subsistence; and yet Illiger, and other good zoologists, regard the rudimentary callosities on the buttocks of the *gibbons*, of sufficient importance to separate these animals, by a sub-genus, from the chimpanzee and orang, although they are so slightly developed as to have apparently little influence on the habits of the respective animals.

But although the specific distinctions are, in our estimation, strong, especially when extremes are contrasted, yet we do not deem them of sufficient importance to establish generic differences; because as we will hereafter show, they only amount to modifications of generic character, and that all the races possess essentially the same psychical elementary attributes, specifically modified.

We proceed, therefore, to the consideration of the "modifications of generic character in regard to form," which we have already exhibited to be as distinctive in the human family as it is in the species of most of the generic families of animals. The texture and form of the hair are frequently of specific

value; as in the *silky monkey* (*Cebus Rosalia*) or the *full bottom monkey* (*Cercopithecus Comosus*). There are few animals more permanently or more strikingly contrasted by the hair than several of the human species.

"Color" is the next modification mentioned in our definition; and in this respect also, the several races of men are permanently distinguished from each other.

But important as all of the preceding characteristics are in a zoological point of view, they are absolutely insignificant compared with the modifications of "intellectual power," which is the last item in our definition. We know of no animals in zoology which are only separated by specific distinctions, so strongly contrasted in their instincts, as the several human races are by their respective intellectual powers. These differences are so remarkable that they have not failed to make a deep impression on the several races, when they have been brought to their notice. Mr. Lawrence, in his Lectures, p. 420, remarks, "The superiority of the whites is universally felt and readily acknowledged by the other races. The most intelligent negro, whom Mr. Park met with, after witnessing only such evidences of European skill as the English settlement of Pisania afforded, and being acquainted with two or three Englishmen, would sometimes appear pensive, and exclaim with an involuntary sigh, "black men are nothing." The narratives of travellers "abound with similar traits." A similar example is mentioned by a missionary on the upper Ganges, who seeing a

Hindoo attentively watching a British steamboat rapidly ascending his sacred river, accosted, and asked him "what God he worshipped?" He immediately replied with emphasis, "I worship the English; for," pointing to the boat, "none but Gods can make such things." Nor was it in the power of the missionary to convince him that Hindoos could be taught to make such a vessel. But we have devoted another chapter to the consideration of the attributes of the several species, which makes it unnecessary to dwell upon the subject at present.

And now, lastly, is it necessary to show that all the kinds of evidence required by zoology—required by a judicial tribunal—can be furnished, to prove that all these specific differences have prevailed from time immemorial? Need we rely on the *probable presumption* of specific differences, arising from specimens of different colors, and different hair? Are we compelled to rest the issue of this question upon the *violent presumption* arising from *slight* anatomical and physiological differences, supported by *slight* differences of manners, habits, dispositions, hostilities, and sexual aversions? On the contrary, can we not say that, step by step, through every grade and kind of evidence,—from the inspired volume, from the tombs of Egypt, from all history, from living examples now known to exist in different quarters of the world,—man is, by stronger distinctions than can be found to prevail between the species of any generic family in zoology, of at least four distinct species?

But a part of the proof yet remains to be furnished in detail, which we will lay before our readers in the succeeding chapters.

CHAPTER VIII.

WHETHER THE DIFFERENCES OF PHYSICAL ORGANIZATION, AND OF MORAL AND INTELLECTUAL QUALITIES WHICH CHARACTERIZE THE SEVERAL RACES OF MEN ARE ANALOGOUS IN KIND AND DEGREE TO THOSE WHICH DISTINGUISH THE BREEDS OF DOMESTIC ANIMALS, AND MUST THEREFORE BE ACCOUNTED FOR ON THE SAME PRINCIPLE.

The whole scientific theory of the unity of the human species depends upon the decision of the question we have above proposed; for unless domestic animals are the analogues of man, none of the theories can be maintained. It is strange that eminent men who have elaborately written upon this subject, should build upon an assumed foundation, without any effort to discover, or to disclose its solidity, or efficiency to support the superstructure. "If" says Dr. Prichard in his Natural History of Man, pp. 26, 27, "we could obtain a complete and satisfactory account of all the phenomena connected with the variation of breeds or races in the different tribes of organized beings, of the utmost extent to which it reaches, of its precise nature, and of the circumstances under which it takes its rise, we should experience little or no difficulty in determining the question whether the diversities which exist between different races of men are specific charac-

ters, or only examples of similar deviation." This is undoubtedly true; for as all the races of men are "organized beings," if he had their history "to the utmost extent," he would "experience little or no difficulty in determining the question." But he had it not, and therefore he proceeds—"We have no hope of immediately obtaining the former of these objects to the fullest extent, but we must endeavor to approach it as nearly as possible. In proceeding in this attempt, we are first led to advert to the general fact that in the domesticated races of animals, and the cultivated tribes of plants, the phenomena of variation have been most remarkably displayed."

This is again undoubtedly true; but what does it affirm? Nothing but "the general fact that in the domesticated races of animals, and the cultivated tribes of plants, the phenomena of variation have been most remarkably displayed;" but not one word about the propriety of making them the analogues of man, which is the object of his whole chapter, and without which his work would be of little value. This is the important matter which should have been exhibited in the clearest light, because it is the foundation of his theory. But he attempts nothing of the kind. He passes immediately from this, to the enumeration of the varieties of domestic animals, and makes them the foundation for all of his subsequent reasoning.

We have quoted Dr. Prichard as an example of the mode adopted by the whole class of authors who advocate the unity of the species; for they all freely use animals as analogues of man, without attempt-

ing to show what analogy subsists between them. There is surely some difference—something in which they have no relation to each other. The hog, the sheep, the ox, the horse, the ass, and the dog, certainly differ from man in some respects. It is not merely the pride of race which makes us believe that we are in many very important respects very different from these animals; for it will cost but little labor to show that not one of them is an analogue for another in their important characteristics and therefore much less of man. Therefore, before they were used as analogues, it should have been accurately defined in what respects they agreed, which was not attempted. It was assumed, at once, that they are analogues in every thing required to be proved, and used accordingly. Is it required to be proved that the variation of color, in the races of men, is not of specific value? The ox, the horse, and the dog, are witnesses to prove the fact. Is it required to prove that a difference of structure is not of specific value? The ancon ram, and the hog are at hand, and considered amply sufficient for the purpose. Thus are we met, at every point, by witnesses summoned from every part of the organic kingdom; but we object, not only to their credibility, but to their competence, *propter delictum*, in comparison of the beings with whom it is assumed they are analogous.

It is, comparatively, an easy mode of philosophizing to find some natural object having some properties in common with any subject under consideration, and having the peculiarity desired to be illustrated,

to infer, from analogy, the operation of the same law in regard to the difficulty to be explained. Having the whole organic kingdom for a range, it would be strange if a man of even superficial knowledge of science, could not find some animal, or vegetable, to prove any, the most absurd position, if he were permitted to regard every similitude as an analogy.

The absurdity of this mode of reasoning may be made strikingly manifest, by applying it to one of the most exciting topics of discussion of the present day, to which it is more legitimately applicable than it is to most of the scientific subjects to which it has been applied so liberally and so triumphantly. There are two species of ants (the *formica rufescens*, and *f. sanguinea*) which regularly and systematically make predatory wars on two other species (*f. niger* and *f. cunicularia*), for the sole purpose of procuring slaves to perform the servile drudgery of their habitations. This is so important a matter to the rufescent ants that the colony would perish if they possessed no slaves; but the amazon or sanguineous ants are not so entirely dependent on their black servants. Here then, we have an example, by a most unerring law, derived directly from the Creator, manifested in the instinct of these insects, that slavery is permitted, if not ordained. It is remarkable, too, that the resemblance (we will not say analogy), to human institutions of slavery is perfect, not only in regard to the genus, but to the color of the beings enslaved: and not only to the color, but to the comparative social, and, if we may so speak, mental conditions of the masters and slaves; for the domestic economy

of the rufescent and sanguineous ants exhibit an advance in comfort and security, beyond the condition of the negro ants, the fair representative of the comparative advance in the civilization of Europe over Africa.

But analogy is not a word of indefinite meaning; nor is it synonymous with resemblance. In common conversation these words are often used synonymously; but strictly they signify different things. Resemblance is an apparent likeness of sensible qualities; but analogy is an agreement of proportions, or relations of a property, or properties, common to two or more subjects. This we believe to be the strictly scientific sense of the words. Let us examine them critically, for they are highly important. If our definitions are correct it is evident that all the theories built upon animal analogies, without a known relation or agreement of properties common to them, must fall to the ground.

"Resemblance is an apparent likeness of sensible properties." It must be "apparent,"—obvious, clear, indubitable. It must be a "likeness,"—a similitude of form, or appearance. It is essential that it should be "of sensible properties,"—not abstractions. Two brothers may resemble each other strikingly, and they may be alike in their manners, habits, and dispositions; but they would equally resemble each other, if they were not alike in their manners, habits, and dispositions. Likeness includes resemblance, because it is the generic word, of which resemblance is a species; therefore the last cannot include the first. This word is so clearly understood

in general, that we should not have troubled our readers with a definition of it, had it not been so frequently perverted by philosophers, in treating of the natural history of man. They have frequently, we may say generally, confounded resemblance with analogy. As for example: men are of different colors—white, yellow, red, and black; the ox, the horse, and the dog, are of different colors, white, yellow, red, and black; therefore they are analogous. We might multiply examples of a similar confusion of resemblance and analogy, by authors of the highest reputations, enough to tire the patience of our readers; but we will proceed to a more important definition.

Analogy is an agreement of proportions or relations of a property or properties common to two or more subjects.

First: "Analogy is an agreement"—because things are only alike in what they agree, not in what they differ, and they are only analogous in what they are alike. In mathematics two figures are analogous, if they have the same ratios, as two squares for example; but one may be larger than the other, in which respect they would not be analogous, because they disagree in size. In comparative anatomy and zoology an agreement of parts constitutes analogy, and a disagreement, difference. All vertebrated mammals agree in having occipital *foramina;* and therefore, all of them are analogous in this respect. In some animals, however, the *foramen* is proportionally larger, placed more backwards in the *occiput*, or more oblique, in which respects they are not analo-

gous. Man, the chimpanzee, and the orang, agree in having canine teeth, in which they are analogous, but those of the orang are always larger than those of the chimpanzee; and this animal has them always larger than man; consequently, no one of these beings is analogous to another in the size of their *cuspidati*. All mammalia agree in suckling their young, and are, in this respect, analogous; but some have the mammæ in the breast, others over the abdomen, others between the posterior extremities, and others in a pouch; in which respects they do not agree, and are not analogous. Classification depends upon these agreements or analogies, and disagreements. In proportion to the number of agreements, or analogies between animals, they are grouped into divisions, classes, orders, genera, and species. As for example, M. Cuvier, in the *Règne Animal*, placed the chimpanzee below the orang, in the descending series from man; Mr. Owen, in comparing the osteological structure of these two animals, with man, found the chimpanzee to be analogous to man in sixteen items, which were different in the orang; and the orang analogous to man in only three items, which were different in the chimpanzee; which, he justly observes, should entitle this latter animal to the precedence in rank. So also of fossil relics; their agreements, or analogies, and disagreements, are the only criteria of classification.

We have been (it may be thought needlessly) particular with this word "agreement" in our definition, because it pervades our definition, and will make it unnecessary to be as particular with the re-

mainder of it. Besides, it is in this matter, especially, that the greatest looseness has prevailed in the use, or abuse, of analogies, and substituting resemblances for them. Let us proceed.

Secondly—"Analogy is an agreement of *proportions* or *relations*." We prefer the word proportions to ratios, because it is the generic word; and because the word "ratios" is generally confined to mathematical proportions, and cannot properly be used in a general philosophic sense. In this general application to sciences, however, the word proportions has strictly the same, though more extended sense, as the word ratios in mathematics; the only difference being that the first is applied to all sciences and abstractions, not susceptible of mathematical demonstration, which the last is not. The word "relations" is also used in this comprehensive sense. These two words comprehend all those things which different objects may have in common, whether physical, physiological, instinctive, or psychical.

Thirdly—"Analogy is an agreement of proportions, or relations *of a property or properties*." That in which they are analogous must be of the same peculiar kind, quality, or degree. For example—two brothers have the same relation to a parent, in which respect they are analogous; but a child, and a grandchild have not the property of relation in the same degree, and are not analogous. Two animals of the same genus have analogous generic properties; of the same genus, but of different species, the generic properties are analogous, and their specific properties diverse.

Fourth and lastly—" Analogy is an agreement of proportions or relations of a property or properties *common to two or more subjects.*" No analogy can subsist without at least two subjects; and that in which they are analogous must be common to them, which are too obvious to require illustration.

Some readers may think the preceding examination tedious and unnecessary; but if they reflect upon the importance of definitions, and the very general looseness of analogical reasoning, especially on the subject of man, they will scarcely think it useless.

If we are correct in the definition of analogy, and we think it cannot be controverted, it is evidently a very rigid, exact, and natural mode of classification and demonstration. The philosopher who uses it legitimately, must not only have pretensions to, but possess an accurate knowledge of the subject he has undertaken. It places at a wide distance from each other such philosophers as Cuvier and Owen, and the host of superficial smatterers who would impose their visionary theories and crude notions on the world, under the authority of analogy, without the least knowledge of the requirements of this severe priestess of nature.

Such is scientific analogy; and although no positive truth can be founded analogically without a rigid adherence to it, yet analogical reasoning is not to be excluded in philosophical investigations. It is often a very powerful instrument, if not to discover truth directly, to direct the mind into proper channels for its discovery. The two processes, however, must

not be confounded; because the one is a certainty, and the other never more than a probability. We call this last *speculative* analogy, to distinguish it from *scientific.* As for example: all the planets of the solar system agree in so many particulars, in the laws known to govern them, that, because our planet contains organic beings, and from the known wisdom and benevolence of the Creator in forming them, we may infer from analogy that all the planets contain organic beings. This is a highly probable speculation, but surely not a matter of science. But mark the conditions upon which such a speculation is founded, and without which it would be only a visionary saying of a dreamer, and not the sober reasoning of a philosopher. The true nature, motions, and laws of the earth are known;—the central position of the sun is known, and its office of dispensing light and heat; the nature of the organic kingdom of the earth is known; the motions and laws which govern the planets in revolving in their orbits, and on their axes;—all subject to the same laws of gravitation, &c., similar successions of seasons, days, and nights, &c., &c.; the same infinitely wise and benevolent Creator made the whole, and stocked this world with organisms;—and from the points of agreement, of scientific analogy, as an inductive basis for belief, we speculate upon a further analogy, and say it is highly probable the other planets contain organic beings. But take from this process the analogies which give it substance, and such an assertion would be perfectly idle.

Speculative analogy, therefore, is only entitled to

consideration when it is founded upon scientific analogy, as an inductive process. In this mode it is an instrument of great power in scientific investigations, either when the subject is of such a nature as not to be susceptible of positive proof; or when circumstantial evidence has been given of a fact, and it is desirable to add other probable circumstances, to give to it additional weight. Even with the greatest caution and care in its use, it is, at best, only a probable presumption; and, whenever resorted to frequently to illustrate a subject or argument, it may be taken for granted that the subject is not understood, or that the argument is weak for the want of a basis. We know of no instance, in any science, but the natural history of man, in which speculative analogy is used as a foundation for it to rest upon; and much less to contradict undoubted matters of fact, which have the united, uninterrupted testimony of history for thousands of years; which are proved as clearly and positively as any historical or natural fact, upon which the human mind rests with entire confidence.

That the advocates for the unity of the human species have pursued this method, have built all their arguments upon speculative analogy and resemblance, is too evident to require to be proved. It is only necessary to open any of their works, and almost every page will prove that they have taken for granted that "that the differences of physical organization and of moral and intellectual qualities which characterize the several races of men, *are analogous in kind and degree to those which distinguish the breeds of domestic animals, and must therefore be account-*

ed for on the same principles. Law Lect., p. 469. Our preceding remarks appear to us so positive against this conclusion, for anything yet exhibited by these authors, that we should hazard little in resting the issue of the question upon them without further remark. Nor should we think the subject required more, if it were a new doctrine, and had been urged by men of less standing in the intellectual world than those of the first class. But a method adopted and sanctioned by such men reqtiires a more detailed examination which we will now bestow upon it.

The points to be examined in the consideration of the proposed question, are, First—Are domestic animals and civilized man in an analogous state of domestication? Second—Are the differences of physical organization which characterize the several races of men analogous in kind and degree, to those which distinguish the breeds of domestic animals? Third—Are the moral qualities of the races of men analogous with those of domestic animals, in kind and degree? Fourth—Are the intellectual qualities of the races of men analogous to those of domestic animals, in kind and degree? Fifth—Must they be accounted for on the same principles? We will briefly discuss each in order.

It is contrary to usage and the nature of things, to be required to prove a negative. In all disputations the affirmant is required to prove his affirmation, before an antagonist can be called upon to prove a negative. Nothing of this kind has been attempted by the affirmants of this position. All that could be fairly demanded of us, therefore, is to show that these

analogies are not self-evident, require to be proved, and that no proof has been offered; which would be a much easier task than what we have undertaken, but we waive the advantage, and enter on its merits.

First—Are domestic animals and civilized man, in an analogous state of domestication?

The analogy in this case is founded on a presumption that domestication and civilization are synonymous. It is not pretended that the words are synonymous, which would be preposterous; but that the effects of domestication upon animals, and the effects of civilization upon man are attended by precisely analogous results. That is, that two wholly different causes, each operating on different subjects, should produce precisely the same effects "in kind and degree,"—a thing, if true, most extraordinary. How do the advocates of this theory arrive at a knowledge of this extraordinary phenomenon? Necessarily by the supposition that the original, natural state of man, was that of a savage, similar to the condition of monkeys, and other animals, *feræ naturæ*. How he emerged from this savage condition it is difficult to imagine. No matter; the supposition continues that he did, became domestic, and then domesticated sheep, oxen, asses, camels, horses, hogs, poultry, &c. After all these, another supposition is necessary, that civilization produces corresponding effects upon man, that domestication does upon animals. Every one of these suppositions is absolutely necessary, one predicated upon another, and all of them required to be granted, to afford a foundation for the theory. They are not self-evi-

dent truths; and yet we know not a single author who has not taken them for granted, and used them accordingly in the natural history of man.

As we shall have occasion hereafter to investigate the probable, we may be excused in saying the certain, original state of man (for exclusive of the Bible, facts prove it); and to show that it must have been a certain degree of what we call civilization, we will not now anticipate the argument. But granting him to have been originally a savage—What effects are produced upon animals by domestication? and what upon man by civilization?

The effect of domestication upon animals is a question of extreme difficulty. We are not positively acquainted with the wild types of a single domestic animal but the turkey, which has been domesticated since the discovery of America. There is, however, some probability that the wild ass of Central Asia, and the wild hog of Europe, are the types of the domestic ass and hog. Even these are not known certainly, because they may have run wild from a state of domestication. All the others, the sheep, the ox, the camel, the dog, and the horse are absolutely unknown in the wild state. In this state of ignorance the field of inquiry is extremely limited, and strictly we should be confined to it.

Dr. Prichard, in his Natural History of Man, p. 27, says—"The original stocks of our domesticated animals are rarely to be recognised in their primitive state among the wild animals of the earth. We know not what has become of them, unless it be supposed that they have been wholly subdued by

man. There are, indeed, wild tribes which appear to have returned in some degree to their original state, after having been more or less completely domesticated. We are ignorant of the time and circumstances under which most of these races became wild, and of the particular breeds from which they have sprung. There is, however, one great field of observation in the tribes of animals which are known to have been transported from Europe to America since the discovery of the western continent by the Spaniards in the fifteenth century. Many of these races have multiplied exceedingly on a soil and under a climate congenial to their nature. Several of them have run wild in the vast forests of America, and have lost all the most obvious appearances of domestication. The wild tribes are found to differ physically from the domesticated breeds from which they are known to have issued, and there is good reason to regard this change as a restoration in part of the primitive characteristics of the wild stocks from which the tamed animals originally descended. The comparison of these wild races with our domesticated breeds affords at least some curious and interesting observations. The animals which were transported by the Spaniards to America are the hog, the horse, the ass, the sheep, the goat, the cow, the dog, the cat, and gallinaceous fowls."

This supposition, that the original wild types of these animals are restored in the wilds of America, and which, throughout all works which advocate the unity of the human species, is assumed to be a fact, is probably correct, and will therefore not be

objected to; although, as a supposition, it has scarcely sufficient substance to be a corner stone for a science. But we grant it, and all the conclusions legitimately founded upon it. We therefore grant, that the hog, by domestication, has been changed "in the shape of his head," his "*cranium*," "quite equal to that which has been observed between the skull of the negro and the European." That the swine of Normandy have "the bone of the leg remarkably long, which in the human kind is observed among the Hindoos." That "swine in some countries have degenerated into races which, in singularity, far exceed everything that has been found strange in bodily variety among the human race."

But we cannot afford the time to confess to every item of change of every horse, ass, sheep, goat, fowl, and vegetable, in structures, functions and instincts, as contrasted with their alleged types. We therefore admit them, in mass, as claimed, for argument, and we ask,—what of them? What makes them the analogues of man? How does it follow that "civilization produces even greater changes in the races of men than does domestication in the inferior tribes? It is easier to make an assertion than to prove it.

We also make an assertion, and defy proof to the contrary:—that there is not upon record a single instance of a physical change of any people, ancient or modern, which can be detected by the anatomist, and which we have good reason to believe to have been produced by civilization. We prove it, first,

by the admission of the authors in question; for they have unhesitatingly classed very ancient nations by their skulls, and told whether they were of the Caucasian, Mongolian, or Ethiopian variety; which would be absurd if they had no confidence in the permanence of peculiar characteristics. We prove it, secondly, by the uniform testimony of history, from Herodotus down to the present day, in which the different races of men are always described with the same characteristics. We prove it, thirdly, by the sculptured figures adorning the tombs of the ancient kings of Egypt, in which the physiognomy and color of the different races of men are preserved, and exhibit them to have been, nearly four thousand years ago, identically the same as they are now.

We might here rest our case with entire confidence; for of what use is it to argue against a theory predicated on a supposition so easily proved to be without the slightest foundation? so absolutely at variance with known and unquestionable facts? If it could be proved that a mouse changed to an ox by domestication, we imagine it would be insufficient to prove that man suffered a physical change by civilization, in opposition to undoubted records to the contrary. If a thousand witnesses should prove the infamy of Dick, how would that affect the character of Henry, who is not only unimpeached, but unimpeachable? But we will proceed to a further investigation.

Before we enter upon the consideration of what is domestication, and what is civilization, it may be

important to define what is a man, and what is an animal; because domestication, as applicable to one, and civilization to the other, have a relation to the nature of the two beings. Such of our readers as are not accustomed to philosophical researches may think it a very easy matter to define man and animal; but they will be soon sensible of their error if they search the proper works. They will find, at the one extremity, the animal and vegetable kingdoms so intimately interwoven, that it is almost impossible to give a definition which will embrace the one, without including part of the other. At the other extremity the difficulty, if not really as insurmountable, has been made embarrassing by classifying man always by his animal, without regard to his spiritual nature. These difficulties, in part, arise from the infinitely varied power of God in the creation, and the limited power of the mind of man to comprehend all the displays of His economy.

The whole of space is occupied by existences, visible and invisible, beyond even microscopic scrutiny. Life has been detected, not only in the living vegetable fibre, but the same active molecules continue an existence in fossil remains which were buried long before the creation of man; as if these particles of animation were the original, indestructible, elementary particles of organic life,—the magazine from whence all beings should draw their increments, and to which they must return after they have lived their appointed hour.

Our object, however, is to exhibit the distinction between men and animals. Most philosophers re-

gard man merely as an animal; nor do we desire him to be otherwise regarded. But why is it that, zoologically, the psychical nature of man is neglected, or avoided, while the instincts of animals are regarded of primary importance by the same zoologists? Purely as a spiritual being,—in his relations to eternity,—his hereafter,—probably zoology has nothing to do with man. But does it also follow that it has nothing to do with his aspirations while here;—with his hopes, his fears, and the thousand spiritual impulses which shape his destiny and make him peculiarly the being he is—man? The few instincts possessed by man, and their absolute insignificance in respect to a vast majority of his actions, compared to the absolute importance of instinct in regard to the actions of animals, show that man must have some other qualification or endowment, to compensate for the comparative absence of instinct; or that all his psychical powers must be regarded as an instinct, of almost infinite modifications. That his powers are not what we understand by the word instinct is evident from the fact, that man has the power of violating natural law, which animals, governed by instinct, cannot do. It is not pretended that animals are mere machines, wound up, and kept in motion in a particular mode, by instinct exclusively, in all cases; but the highest manifestations of voluntary reason exhibited by them, are always subordinate to their instincts. The inferiority of animals compared with man, is not that their instincts are inferior, as the means to accomplish an end, to any of the boasted powers of man; but it consists in being limited to

particular objects, without any ability to diversify or combine them; and relate, chiefly, if not wholly, to their immediate necessities, their existences, and the continuation of their species. Reason, on the contrary, may, and often does, violate natural laws, and is, in very few instances, subordinate to instinct. It is never perfect, because it depends upon human industry and experience for its development. It is superior to instinct, in its varied power, wide compass, indefinite range, fertility of expedients, and capability of indefinite combination, by which causes and effects are traced and the victories of mind over matter obtained.

It is contended by most philosophers, that animals have psychical powers as well as man; that the difference between them is only in degree, not in kind. It is an important mistake,—a gratuitous error,—attended with confusion of facts and ideas, without the slightest benefit to animals, or science. We will not even admit it to have originated in the benevolence of the heart; for we are rather inclined to believe it to have sprung from the opposition of some men to religion, from a desire to account for everything upon physical principles, and a natural desire of the mind to be free in its operations,—independent,—to rove where it pleases;—facts in themselves, if analyzed, sufficient to prove the human mind to be wholly different from anything possessed by animals.

"We cannot," says Lawrence, Lect., p. 99, "deny to animals all participation in rational endowments, without shutting our eyes to the most obvious facts,

—to indications of reasoning, which the unprejudiced observation of mankind has not failed to recognise and appreciate. Without adverting to the well known instances of comparison, judgment, and sagacity, in the elephant, the dog, and many other animals, let us read the character drawn by Humboldt of the South American mules.

"When the mules feel themselves in danger, they stop, turning their heads to the right and to the left: the motion of their ears seems to indicate that they reflect on the decision they ought to take. Their resolution is slow, but always just, if it be free; that is to say, if it be not crossed nor hastened by the imprudence of the traveller. It is on the frightful roads of the Andes, during journeys of six or seven months across mountains furrowed by torrents, that the intelligence of horses and beasts of burden displays itself in an astonishing manner. Thus the mountaineers are heard to say, "I will not give you the mule whose step is the easiest, but him who reasons best."

He continues: "If the intellectual phenomena of man require an immaterial principle superadded to the brain, we must equally concede it to those more rational animals which exhibit manifestations differing from *some of the human only in degree.* If we grant it to these, we cannot refuse it to the next in order, and so on in succession to the whole series, —to the oyster, the sea-anemone, the polype, the microscopic animalcules. *Is any one prepared to admit the existence of immaterial principles in all these cases? If not, he must equally reject it in man.*"

The mule, which he selected *par excellence*, is an unfortunate example for the learned lecturer. The ass is peculiarly a mountain animal, adapted by the Creator, particularly by the shape of its hoofs, for the frightful precipices, and inequalities of mountains; and in an especial manner adapted to them by his instincts. The mule partakes of the instincts of his parent, consequently mountain scenery was exactly calculated to exhibit the full play of his natural endowments. It is, therefore, probable, that if the learned and observant Humboldt had paid attention to the fact, he would have discovered, that the mules, "who reason best" "on the frightful roads of the Andes," were those which partook more of the nature of the ass parent, than the horse.

It is, however, from similar examples that it has been inferred that the minds of animals "exhibit manifestations *differing from some of the human only in degree;*" and after arriving at this conclusion in regard to "some," another assumption is speedily and easily made, that they differ from none "only in degree." And yet there is not an author of any reputation, who will affirm that the most rational animal,—the elephant, or the dog,—has a mind constituted, *as a whole*, in any degree like the human animals, may be found with "manifestations differing from SOME of the human" manifestations "only in degree,"—but no one animal can be found having them ALL in any degree necessary to constitute a human mind. The human mind is not a single, an isolated manifestation. It is a combination, if not of thirty-five simple elements, as contended for by phre-

nologists, certainly of so many distinct principles that it would require the combination of all the "manifestations" of the animal kingdom, in a single individual, to represent it, if it could be done at all. And yet we find grave philosophers selecting an elephant to represent one of these principles;—a dog another;—a bee another;—a spider another;—a mule another;—and they tell us, as if they had achieved a victory,—"that immaterialists will not concede the obvious corollary of these admissions, viz., that the mind of man is merely that more perfect exhibition of mental phenomena which the more complete development of the brain would lead us to expect; and still perplex us with the gratuitous difficulty of their immaterial hypothesis." Lect., p. 100. He continues: "Thought, it is positively and dogmatically asserted, cannot be an act of matter. Yet no feelings, *no thought*, no intellectual operation has ever been seen except in conjunction with the brain." We do not intend to discuss what it is in man which constitutes the peculiar organization giving rise to the mind, which has nothing to do with the subject under consideration; but this learned anatomist has made so round an assertion that "no feelings, no thought, no intellectual operation has ever been seen except in conjunction with the brain," that we cannot forbear quoting from Smith's Select Discourses, p. 133, the following: "But after all, little is the necessary connexion between either the shape or the bulk of the brain and the intelligence of the individual, as the following examples will prove. A case has occurred, where, in conse-

quence of the effusion of water *within* the ventricles, the cerebral substance has been absorbed, until, to appearance, little more than membrane was left. On the other hand, a head has been examined, where, from pressure by water, without and upon the brain, it was compressed, to what was represented as little more than a *knob*. One of these instances happened in Philadelphia, the other in London. Both were observed before phrenology was thought of, and rest, I believe, on undeniable authority. IN NEITHER WERE THE MENTAL FACULTIES MATERIALLY AFFECTED."

Here we have two undoubted cases of human minds without brains. We do not quote them to show the unimportance of the brain to mental power, for we regard them merely as unaccountable exceptions to a general law; but they are, nevertheless, sufficient to disprove the assertion of Mr. Lawrence, that "no thought, no intellectual operations have ever been seen, except in conjunction with the brain." These examples are also important in another point of view, which we will notice hereafter.

But, as we have said, what constitutes the human mind, and where located, are not the questions which now concern us. The question is whether animals have a mind differing from the human mind only in degree, not in kind, and are therefore the analogues of men. This question must be decided simply upon the manifestations of each, without regard to the location, or organ of the mind. Whatever we may think of the importance of the mass of brains, and the vertebrated structure, to advance animals in the scale of creation, this notion is evidently

ideal, if we take man from the list of vertebrata; for compare the elephant, the fox, and the horse, all animals of the highest class, below man, among vertebrata, with the honey bee, the ant, and the spider, all invertebrata, having a ganglionic, instead of the more perfect cerebral nervous structure of the vertebrata. Who, that has studied the habits of these animals respectively, will say, that, judging them by the power of their instincts, and their apparent fertility of expedients to meet unforeseen contingencies, these little insects are inferior to the large animals we have placed above them in our classifications? Who does not see that the latter have been elevated rather because they resemble man in structure than from their merits?

We are not among those who are disposed to give credit to all the marvellous stories related respecting the intellect of animals. They are frequently invested with intellectual faculties, by the fancy of the relators, when the action from whence it is inferred, may have proceeded from no higher impulse than instinct. The elephant which blew the muddy water over the tailor who pricked his proboscis with a needle, may not have designed the punishment, though deserved. Having filled his trunk with water, probably designed to be blown over his own body, on passing the window he may have introduced his trunk for the reception of former favors; but immediately remembering the pain of the prick, he gave the hasty grunt which puffed the contents over the tailor, while he hastily withdrew the instrument. The thing was so well timed, the brute so grave and

stately, and so well calculated to make an impression on the merry beholders, that, without attending to the circumstances which constitute design or accident, the whole race of elephants has been benefited by the anecdote, by being elevated to the condition of "half reasoning" animals.

We have, however, a more undoubted, and therefore a stronger example of animal reasoning power, in that little mathematical architect, the honey bee, given by Dr. Bevan in his Natural History, Physiology, and Management of the Honey Bee, p. 326. "A very striking illustration," says he, "of the reasoning power of bees, occurred to my friend, Mr. Walond. Inspecting his bee boxes, at the end of October, 1817, he perceived that a centre comb, burthened with honey, had separated from its attachments, and was leaning against another comb, so as to prevent the passage of the bees between them. This accident excited great activity in the colony, but its nature could not be ascertained at the time. At the end of a week, the weather being cold, and the bees clustered together, Mr. Walond observed, through the window of the box, that they had constructed two horizontal pillars, between the combs alluded to; and had removed so much of the honey and wax from the top of each, as to allow the passage of a bee: in about ten days more there was an uninterrupted thoroughfare; the detached comb, at the upper part, had been secured by a strong barrier and fastened to the window with the spare wax. This being accomplished, the bees removed the horizontal pillars first constructed, as being of no farther use."

This is one of the strongest instances of apparent reason in animals that we now remember. The pillars to keep the two combs apart, before the removal of the wax and honey, at the point of pressure;—making a passage between the combs, after the construction of the pillars, for the purpose of enabling them to fasten it firmly at the top;—and, after the top had been firmly secured, to remove the pillars, as obstructions no longer needed, are operations so skilfully and ingeniously conducted and contrived, that man must have made considerable advance in intellectual cultivation to equal them.

Many more examples might be given, particularly from insects. Spiders and ants would afford many curious and pleasing illustrations. The horse, dog, and indeed nearly every animal could contribute a share; but we have given the above strong example as sufficient for our purpose.

It may facilitate our progress, and give a clearer understanding of the subject, to define instinct and reason, and examine each critically. The importance of the subject excuses the time occupied by it.

Instinct is an unimprovable attribute of definite extent and variety, producing certain invariable modes of action in the same species of animals, under the same circumstances.

It is "unimprovable;" for it is perfect for its object, without improvement. Besides, it it were improvable it would require the beings subject to it, to be organized so as to conform to progressive improvement. There are but two modes, with which we are acquainted, that beings can be so organized.

First, by generation. If God had seen proper so to constitute all animals, their instincts might have been made improvable by each generation, and the accumulations transmissible successively. We know that this is the fact in regard to animals domesticated by man; for the properties acquired by domestication are to a certain extent, transmissible by generation. But we also know, with equal certainty, that animals, in their natural conditions, never improve their instincts;—that every species is, at this day, in every particular, the precise representation of those which lived at any former period. We also know that those which are domesticated, and thus have their instincts altered, return to their original instincts soon after they regain their liberty. This is not only true in regard to their acquired domestic habits, or modifications of instinct, but also in regard to their bodily forms. It may be truly said that what they get from man is as slightly fixed, and as changeable, as their natural properties are permanent and unalterable.

It is an "attribute"—a gift from God, which requires no remark.

It is "of definite extent and variety"—Its limits are precise,—confined to particular objects, and modes of action. The instincts of honey bees are confined to making wax and honey in the particular mode by which they perform these operations. It would be impossible for them to adopt the mode of any other species of bee,—the humble bee, for instance, which deposits honey in cylindrical sacks, arranged in rows, with equal art, but not as

beautiful, delicate, or mathematically accurate in form. In the prosecution of their labor they may meet with a misfortune, such as that mentioned by Dr. Bevan; and they adopt expedients to remedy it. But the whole variety of expedients of which they are capable, relate directly to the fulfilment of their instinct, adequate and commensurate to it, but neither less nor more. In their operations they have no settled purpose, no design, properly speaking; for these pre-suppose the action of the mind to deliberate, to compare, to decide, and act accordingly. Most of the actions of animals we know are not the result of thought; and others we may justly conclude are not the results of thought; because they are immediately connected with, and relate to their instincts, and are *always of a character beyond what abstract reason, without experience, could accomplish in man.* Several thousand years elapsed before man discovered the diving-bell, by means of which he can descend into deep water, to collect treasure; but the aquatic spider has performed this operation, by a similar contrivance, displaying equal ingenuity, having the same object, from the beginning. Caterpillars construct a wonderfully ingenious cocoon to hold themselves, in which they undergo a change, the form and nature of which it is impossible they should understand; and yet, although their bodies are cylindrical, they spin their cocoon of a triangular, or other shape, to adapt it to the future form of the chrysalis with wonderful precision.

The last clause is,—"producing certain invariable modes of action in the same species of animals un-

der the same circumstances."—All animals of the same species, under the same circumstances, arrive at the same results, by the same means, without previous instruction. It is highly probable that all hive-bees would treat a similar accident as that detailed by Dr. Bevan, precisely in the same manner. We know that, from time immemorial, they economize space precisely in the same manner, and by the same means; for, except their royal cells, all their cells are usually hexagons; yet, if the economy of space in the corners, or other irregularities of the hive, should require other forms, all swarms conform to the space with remarkable precision and regularity, and deviate from the hexagon form of their cells. No animal has received higher encomiums for his reasoning powers than the beaver. He has been frequently compared with man, not only in the exercise of his mechanical powers, but his ingenious expedients in conforming to various circumstances; but now that the habits of this animal are well known, and his actions are divested of the marvellous, it is discovered that all beavers, old, or young, wild or tame, exhibit the same constructive powers, carried on, under the same circumstances, invariably in the same way. All beaver-dams, on sluggish streams are straight; and they are all convex up the stream, if subject to floods and ice drifts. Young beavers, domesticated, exhibit the same propensities; consequently experience and thought can have but little to do with the operations.

Let us now define the attribute of human reason,

and subject it to the same analysis, when we can see if it is analogous with instinct.

Reason is an improvable attribute of indefinite extent and variety, generally producing different modes of action in individuals of the same species under the same circumstances.

It "is an improvable attribute." The history of mankind proves it to be improvable in the same manner, and with the same certainty that zoology proves instinct to be unimprovable. The Greeks improved upon the Egyptians and Phœnicians; and most assuredly the present age has improved upon the Greeks and Romans, to say nothing of the middle ages. The fact is so self-evident that we will not enlarge upon it, especially as we will have occasion to notice it in a subsequent chapter. That it is an "attribute" is also too apparent to require to be proved. We therefore pass on to the next clause. "Of indefinite extent and variety." The capability of extension and of embracing every variety of objects and subjects, constitute the peculiar and distinctive features of reason. If it should be conceded, as it is contended for, by many judicious and learned men, that animals are endowed with reason, we know of no one who asserts it to possess a capability of extension beyond their specific instincts; and of expansion, embracing every variety of objects and subjects. In this sense, at least, it may be regarded as an additional attribute, an additional sense, (if the word is better adapted to the idea), to the five senses possessed by man in common with most animals. Several eminent naturalists

have ascribed to bats a sixth sense. Spallanzani extracted their eyes, and varnished their heads, to prevent hearing and smell, and yet the bats could fly in every direction, avoiding obstructions as perfectly as with sight, hearing, and smell. Cuvier may have settled the controversy, by demonstrating the extraordinary nervous sensibility of the wings of the bat; but it would be an extremely difficult task to show that human reason depends upon a greater sensibility, or any other quality or property in the brain, because two undoubted instances are known of men without brains, who possessed ordinary mental powers.

But whether it is conceded, or not, that a human being has an additional sense or attribute,—the spirit breathed into him,—the image of God impressed upon his nature, at his original creation,—no one will deny that he possessed a *universality* of mental power, *different in kind and degree*, from the specific, instinctive, limited mental powers of animals, which never have a range beyond their physical necessities, or the habits acquired by association with man. In *kind*, because it is indefinitely extensible and expansible, instead of being confined to a definite object; and in degree, by being universal, instead of particular. We will not stop to inquire how this is produced;—whether a Newton or a Shakspeare excels other mortals only by a more ample development of the anterior cerebral lobes, by having an extra inch of brain in the right place;"—we only rely on the facts as history and nature prove them, without regard to any theory. We pass to the last clause of our definition, viz.:—

" Generally producing different modes of action in individuals of the same species, under the same cirstances."

This is a most important part of the definition. We have seen that animals of the same species, under the same circumstances, act invariably in the same manner; but if any number of men were separately consulted, upon some new and difficult matter, relating to their welfare and prosperity, scarcely any two would agree in the mode of performing it, if they should in its utility. The subject we are treating upon is no bad example of the diversity of human reason applicable to a subject. From Linnæus to Prichard,—including more than a dozen of names brilliant in science,—all of them men trained to the art of reasoning in the most approved manner, one following another, having the benefit of the previous labors,—and yet no two of them agree in the process of arriving at results, and not many of them in the results.

It is not, however, in abstract reason that a comparison can be made between animals and men. Animals have nothing resembling it, unless it should be bestowed upon them by a naturalist deficient in sound judgment, in proportion to the exuberance of his imagination. This fact alone is sufficient evidence that there is a difference between them in kind, as well as degree. But the mechanical genius of the two races will afford us the most striking examples of the reasoning power of each race of beings, with the advantage of avoiding metaphysics, and being particularly the qualities in which animals have been most esteemed.

We have seen that all animals of the same species perform operations invariably in the same manner, under the same circumstances. The beaver builds his cabin and dam precisely the same, at this day, that all beavers did before him. He eats the same food, and is precisely as provident for his winter supply. Bees construct their combs now, as bees did at any former period. Every species of bird now build their nests of the same form, materials, and in the same positions, as did their progenitors for thousands of years. How has it been with man? We need not refer to ancient times when men were supposed to live in caves and eat roots; —to China, India, ancient Babylonia, Egypt, Greece, Rome, the Middle Ages;—but we ask where are two individuals of the same nation, of the same family, unless one has been at the pains of copying another, who will build two houses or barns as precisely alike, under the same circumstances, as two beavers their huts and dams,—two swarms of bees their combs,—or two birds of the same species their nests? In regard to food every species of animals eat the same food, as a matter of choice, that all animals of the same species did before them; and, of choice, occupy the same habitats.

But suppose we admit, which is contended for, and which we are neither disposed to deny nor affirm, that animals have "some" powers analogous to a human mind. Nay let us admit (which is unquestionably not true), that an animal could be found, in the various kingdoms, possessing one analogous trait,—another possessing another trait,—

and so on, until every psychical human feature was represented in some one animal, all of which, taken collectively, would represent a man. What then? It is plain that no one of them could be the analogue of man; because a single element common between them psychically, could no more make them alike, than a chemical union of hydrogen and nitrogen, and the like union of hydrogen and oxygen, are analogous. They must, then, be collectively analogous, if at all, which is impossible; because the union of so many heterogeneous natures could not produce a man's nature.

We hope we have now satisfied the reader that an animal is an instinctive, and man a psychical or intellectual being. We have not defined man and animal physically, which we have left for a more appropriate place. We are now prepared to return to the question,

"Are domestic animals and civilized man in an analogous state of domestication?"

The words domestication and civilization must not be understood literally; but as synonymous in effects, if we may so speak, but not in meaning. Lawrence says, p. 254, that "man cannot be called, in the ordinary sense of the word, a domestic animal; and yet he is eminently domestic." But in what sense "he is eminently domestic," analogous to the state of domesticity of animals, he does not mention; nor do we remember to have seen it explained by any other author. This is the turning point, the pivot upon which their theory rests. It should therefore have been explained clearly and

satisfactorily. We cannot suppose these great men not to have seen the importance, the necessity, of proving this fundamental principle of their theory; but we must also suppose they saw the extreme difficulty of it; and that it was easier taken for granted than proved. We admit that man is eminently a domestic animal;—that domesticity in him is a natural instinct, a law of his being, a principle upon which all of his virtues, all of his civilization, all of his progress in this world, depends. These things they could have proved, because they are recorded upon the pages of sacred and profane history. But when they had accomplished this, it would become necessary, to make animals and men analogous, to show that domestication in animals is also a natural instinct, a law of their being, a principle upon which the perfections of their natures depend; which all history, and our own experience disproves. So far from being instinctive in animals, it is a constraint upon their natures, a violence done to them, a tyranny exercised over them. It is, in fact, not domestication, but a slavery so absolute and perfect that their very natures are subdued, their natural instincts opposed to man's interest blunted and overpowered, and only such of them cultivated as subserve his interests, at the expense of others. The word domestic is, in fact, only figuratively applied to wild animals appropriated by man to his own use; for although they are generally an appendage to the *domus*, domicile, yet it is in a condition of unmitigated bondage, without any of the relations necessarily attendant upon a domestic condition. Can we won-

der at the modifications upon the tempers, even upon the bony structure of animals under these constraints, and under a mode of life directly the reverse of their natures, in some, and often in many particulars? Carried to climates not their natural habitats, and in which they could not live but by the care of man, and by an artificial supply of food? The cranium of the wild boar, for example, differs from that of the domestic boar, as much as the skulls of the civilized European and barbarous African;—as much as any "variety of the human race,"—says Blumenbach, endorsed by his pupils. They forgot, or overlooked, the fact, that all the improvements made upon animals by domestication, are absolute degenerations of them in regard to themselves. That, to produce these degenerations in wild boars, the animals are confined in a stye, where their natural instincts, to which the formation of their heads are specially adapted, are not called into activity; or they are turned into inclosures, with rings in their noses, to prevent them from exercising their propensities. It is a well known fact that a limb not used, as designed by nature, will undergo a very considerable alteration in size, form, and power. The domestic hog, being thus deprived of the use of his nose, and not depending on it for his living, the powerful muscles attached to it, which contribute to give form to the cranium, soon lose their controlling influence, and suffer the bones to be modelled accordingly. The domestic cat, on the contrary, which undergoes comparatively a slight change by domestication in habits, though in fact more a domestic animal in a strict

sense, actually undergoes no osteological, we may say anatomical, change, that can be detected, and the only difference is the color. Thus it is apparent that the constitutional changes in animals are produced not by domestication in the abstract, as applied to man, but by changes from a natural to an unnatural state, and that the anatomical and functional changes are proportioned to the departures from nature.

These same authors tell us that civilization does not produce degeneration in man, either in regard to himself or any of his relations to the external world; that civilization, instead of being produced by constraint of another being, is the voluntary act of man; that it is so natural, at least congenial a condition to man, that his cranium enlarges in the intellectual, and diminishes in the sensual sections, and, consequently, has acquired an immense increase of intellectual power; that even his physical and moral powers have increased by civilization; the first established by Peron by actual measurement with a dynamometer; and the last by universal history. They were not aware that the establishment of these facts was in direct opposition to all analogy between men and animals, and directly adverse to their theory.

No consequences are incident to civilization, the operation of which, on man, are of a nature similar to the constraints of domestication upon animals: on the contrary, beneficial developments are produced by it, solely because it places him more advantageously in the position to exercise his natural powers according to the design of his creation, and to increase their

power by use. M. Guizot, in his admirable History of Civilization, p. 25, says—"Two elements, then, seem to be comprised in the great fact which we call civilization; two circumstances are necessary to its existence; it lives upon two conditions; it reveals itself by two symptoms: the progress of society, the progress of individuals, the melioration of the social system, and the expansion of the mind and faculties of man. Wherever the exterior condition of man becomes enlarged, quickened and improved; wherever the intellectual nature of man distinguishes itself by its energy, brilliancy, and its grandeur; wherever these two signs concur, and they often do so, notwithstanding the gravest imperfections in the social system, there man proclaims and applauds civilization."

The imagination which can discover any analogy between the domestication of animals, and the civilization of man, must be more than fertile; it must be creative. There is not even a remote resemblance, a faint likeness of a single feature between them.

The second point for consideration is—"Are the differences of physical organization which characterize the several races of men, analogous in kind and degree to those which distinguish the breeds of domestic animals." This branch of our subject will detain us but a short time.

There are two modes of viewing this subject, which are altogether different in their natures, and which have frequently puzzled us to understand which was designed. One view of it may be thus stated —"Are the differences of physical organization which characterize the different races of men," one

race compared with another race, "analogous in kind and degree to those which distinguish the breeds of domestic animals," one breed compared with another breed. To place this view in a strong light we will state the argument thus: Different breeds of domestic animals, confessedly of the same species, vary in color, organization, and instinct; different races of men vary in color, organization and intellectual quality not more than different breeds of domestic animals of the same species; therefore all the races of men are of one species. To make this syllogism good, the "different races of men" must be conceded to be "different breeds of domestic animals," which is precisely the thing required to be proved.

The other view of the subject is, not that the different races of men are compared with one another, and the result of this comparison made analogous to the result of domestication upon animals, but that the races of men are made analogous to the breeds of domestic animals; and, therefore, that the laws applicable to one are to the other. It may be thus stated syllogistically: Different breeds of domestic animals vary in color, organization, and instinct, and are of the same species; different races of civilized men are different breeds of domestic animals, which vary in color, organization, and intellect; therefore the different races of men are of one species. We will say nothing of the logic; but supposing it all to be good, it does not even approach the point at which they aim. The point to be proved is not that civilized men vary in these points, for they do not. If, they did, Europe would be the most party colored,

the most varied in organization and intellect, of any or all the countries in the world, except China, which might compare with them; whereas, Europe and China are the most uniform in all these things. But the point to be proved, and at which they aimed, is, that men vary in these particulars in all states of barbarity or refinement; and that of all conditions, barbarity, under the same circumstances, produces the greatest change. If we should grant that domestic animals are the analogues of civilized man according to their proposition, they cannot be the analogues, for nearly all of Africa, much of Asia, all of Oceanica, and all the aborigines of the two Americas; consequently they are of no use for general application, because they do not apply to the only difficulty to be explained.

We say we have been perplexed to determine which meaning to adopt; for in the progress of their works they alternate between the two with perfect freedom, as if there were no difference between them. It is, however, of small consequence, as, in any sense, it is equally untenable.

We will now turn our attention briefly to the "differences of physical organization" which are said to be "analogous in kind and degree to those which distinguish the breeds of domestic animals." Fortunately for this part of our subject, Linnæus and his school placed man in the order *primates*, among monkeys, bats, and lemurs; to which Blumenbach and his school very properly objected. These were equally anxious to preserve the unity of the human species, and to separate man from the debasing association of monkeys, lemurs, and bats. Physical or-

ganization, in other words comparative anatomy, was the instrument used to dissever them. It did the work effectually; for they proved the differences incident to the erect and prone attitude and progression in all the particulars relating to the occipital foramen and condyles, the spine, the thorax, the pelvis, the sacrum and coccyx, the femur and its articulations, the foot, &c., &c. The whole comparative anatomy, and still more important, the physiology of man and animals, are discussed by these authors so accurately, philosophically, and conclusively, and especially by Mr. Lawrence, that they have only made it necessary to refer to their works to refute their position in respect to a physical analogy between men and animals. In some respects all the *vertebra*, and in several more respects all the *mammalia*, are necessarily analogous; but here analogy ceases between men and animals, more abruptly than it does between apes and *cetacea*, bats and sloths, lions and kangaroos. Beyond the *class*, there may be resemblances between men and animals, but no analogies. All mammalia are vertebrated; have warm and red blood, and a heart with four cavities; have lungs which move freely in a distinct thoracic cavity; have the intervertebral surfaces flat; have the posterior extremities, when present, always attached by a pelvic arch to a solid sacrum; have the thoracic and abdominal cavities separated by a muscular diaphragm; have a bladder; are viviparous and furnished with mammæ, &c., &c. In these, and the like, they are analogous, and in all the functions incident to them.

Although these points of agreement are important, yet they only constitute the great features by which

a great number of animals are *classed* together. If classification should stop here, zoology would be of little importance; for it is the descending series, the orders, genera, and species, which give to the higher divisions their value. Unlike money, the value of classification increases, as the denomination in the series descends; for the higher denominations are not the real currency of science, but only denominations for account,—a kind of bank money,—chiefly serviceable by confining and giving direction to the descending series. If this were not so we should not hear of the great advantage of comparative anatomy to zoology; for who would think of honoring a Cuvier and an Owen for distinguishing animals which had back bones,—which had mammæ,—and the like, from animals which had no such structure? Surely, attainments of this kind would scarcely deserve immortality. Yet, as we have said, these classifications in the great are valuable by confining and giving direction to the descending series. It is precisely here, and for this reason, that man separates himself from instinctive mammalia, by his psychical properties. Up, or rather down, to this point of separation there is an analogy between man and animals; but beyond this point only a resemblance in some respects. It is precisely here where the confusion of analogy and resemblance has taken place. Perceiving it in the great, they took resemblance for analogy in the small. There is nothing tangible, nothing visible, to break the chain off at this point, as there is in aves, reptilia, and pisces;—or as there is in the class mammalia, in the orders, bimana, quadrumana, carnivora, &c. All of these have

certain visible or tangible physical characteristics, which could be exhibited by the knife, if they were not openly visible to the eye. But psychical attributes cannot be made manifest by the knife, although their effects are apparent to the eye, in fact to all the senses, and of infinitely more importance than any physical organization that can be imagined.

Instead of detailing the differences of physical organization, to show where analogy begins and ends between men and animals, which might be tedious to the general reader, and unnecessary to the scientific, we will close this part of our subject by a few quotations from Mr. Lawrence, a professor of anatomy, and one of the best writers on the natural history of man. He has devoted five or six chapters of his valuable work, chiefly to detailing anatomical differences between man and animals. In remarking about the opinion of Monboddo and Rousseau, that men were monkeys, he says, p. 111: "The completely unsupported assertions of Monboddo and Rousseau only show that they were equally unacquainted with the structure and functions of men and monkeys; not conversant with zoology and physiology, and therefore entirely destitute of the principles upon which alone a sound judgment can be formed concerning the natural capabilities and destiny of animals, as well as the laws to which certain changes of character, certain departures from the original stock, may take place."

"Mankind in general," he continues, "the unlearned and the unscientific, do not commit the gross mistake of confounding together man and animals: this distinction, at least, so clear and obvious

to common observation and unprejudiced common sense, is preserved in their short division of the animal kingdom into man and brutes."

In reference to the assertions of Mr. White, that the "Negro seems to approach nearer to the brute creation than any other of the human species;" and that "the orang has the person, the manner, and the actions of men;" his indignation swells to the utmost bounds of propriety and bursts forth as follows: "I do not hesitate to assert that the notion of specific identity between the African and orang utang (on which point Mr. White's language is not sufficiently clear to enable me to decide what he means) is as false, philosophically, as the moral and political consequences, to which it would lead, are shocking and detestable. The human *species has numerous distinctive marks, by which, under every circumstance of deficient or imperfect civilization, and every variety of country and race, it is separated by a broad and clearly defined interval from all other animals, even of those species which, from their general resemblance to us, have been called anthropomorphous.*" p. 112.

The peculiar characteristics of man appear to me so very strong, that I not only deem him a distinct species, but also put him into a separate order by himself. *His physical and moral attributes place him at a much greater distance from all orders of mammalia, than these are from each other respectively.*" p. 117.

It is useless to multiply quotations, particularly as, in many subsequent parts of our work, the subject will be repeatedly illustrated. But we think the reader who is familiar with the osteological and physiological comparative anatomy of man and animals,

if unbiassed in favor of any theory, and who is also acquainted with the total and absolute changes of the nature of animals produced by comparatively slight differences of structure and function, will be surprised that men skilled in this particular department of knowledge, should build a theory upon analogy, between beings placed at a much greater distance from each other than any of the instinctive mammalia are from each other: and these inferences are confessedly drawn from anatomical and physiological phenomena in which there is no analogy between animals and man.

We pass to the third branch of the proposition—viz.: Are the moral qualities of men analogous in kind and degree with those of domestic animals? For the purpose of abbreviating our work we will embrace, in our present considerations, the two remaining subjects of the proposition. This chapter has already swollen beyond the limits we assigned for it, notwithstanding our desire to contract it.

Nor can any confusion arise from considering moral and intellectual qualities together; for although no being can be moral without an intellect, and a being may have an intellect without being moral, yet there is a necessary connexion between the two qualities which make them peculiarly and exclusively human. We confess that we do not precisely understand in what respects it is designed that the instinct of animals is analogous to the morals and intellect of man. Indeed, the whole use of animal analogies, in the natural history of man, appears to be designed with an indistinctness, a want of substance, and an indefiniteness, which, like the oracles

of old, make them susceptible of any meaning, and of any application. Our memory furnishes us with no author who has bestowed, by name, psychical characteristics upon animals, but Dr. Prichard. With the view of laying some foundation for the subsequent psychical parallels he designed to make between the races of men, he dignified the instincts and habits of animals with a sub-section, entitled "Psychological characteristics."

In a former part of this chapter we have discussed the differenee between psychical and instinctive properties. If we have been successful, of which the reader must judge, no animal has any property analogous to a human mind. We then asserted that man has an additional attribute, an additional sense to the five senses he possesses in common with animals,—a psychical attribute which connects him with eternity. Moses tells us that man was made in the image of God;—that man was the only creature of the creation which required the breath of God to vivify,—to be a living soul. It is for this reason theologians very justly regard man as having two natures, body and spirit. We designedly avoid the theological question; but the day will come when any natural history of man will be regarded as philosophically defective which does not recognise the immortality of his spirit. Why should it not? The consciousness of every man is a witness for it;—the universality of adoration of some invisible being, is another;—and even those materialists who reject all testimony not cognizable by their senses, write and act for immortality,—obey the aspirations of their

souls, of their spirits, by their acts, while their tongues and pens deny their existence.

But apart from any consideration of eternity, of another life, it cannot be denied that, while in this life, man is, philosophically, eminently a psychical being; having a mind which, as a whole, if not in all its parts, is not possessed by any living creature. It is by means of it that he has subdued all animals; —subdued the forests and the earth, and compelled them to contribute to his comforts and wants;— subdued the elements and rides triumphantly on the waves in defiance of the winds;—and seizes upon the air and makes its elements enter into new combinations for his use. Take from him his psychical nature, and he will immediately sink in the scale of creation at least to the foot of his class of mammals; because his instincts are fewer and less decided; naked, with innumerable wants, and yet without means to cover his body, supply his wants, or arms proper for his defence. These animal defects become causes of power under the control of the spirit, the peculiar characteristic of his nature. They constantly call it into activity, and increase its power by exercise and experience. Nor does it rest satisfied with achieving a victory; it desires that others should know it, should approve of it, and be acquainted with the means of its accomplishment. Hence, actuated by the true nature of a spirit not necessarily connected with time, it has devised a means of communication with its fellows for thousands of ages after the body shall have returned to its kindred dust. The kings of Egypt are returning to the living, and instructing us in the knowledge of

their day. The sages of Greece and Rome have never been withdrawn from us; and many men of this age will live until the last trumpet shall obliterate all thoughts of human wisdom.

Man is not now what he was at any former period. At the head of creation, he is emphatically a type of it in every department. A mortal, immortal even in this world; containing in himself more than every perfection of every animal,—more than all the variety of every tree, herb, and flower. There is no limit to his progressive improvement but the extent of creation. He cannot create; but his power of analysis and combination is indefinite, and often approaches so near to creation that it clearly and positively proves his close alliance with Him who made all things.

History conclusively proves,—nay, our own experience proves,—for every man of fifty years of age has seen,—that man progressively improves. He must therefore possess an attribute susceptible of such improvement. If he do not, he could make none; for he cannot alter his nature, any more than he can create a new particle of matter. Consequently every improvement must be in strict conformity to his natural endowment, according to the design of his creation; for, if contrary to this endowment, so far from being an improvement, it will be an abasement, a degeneracy. We have seen that animals, as they have only a single nature, came from the hand of the Creator endowed with instincts fully developed, necessary for their well being. Man, on the contrary, came from the Creator with few instincts, but with a mind possessing germs of indefi-

nite improvement, depending upon the proper influence of the whole physical kingdom for their vigorous and healthy growth. His animal and spiritual comforts are only promoted by the proper cultivation of these germs; which, together with speech, the great instrument for cultivating them, were given to him designedly for such improvement. Man, therefore, is in his natural condition when progressively improving, morally and intellectually, in civilization, as much as the wild animal which occupies his natural range, and is governed by his unimprovable instincts. So, likewise, in the multitude of circumstances which constitute civilization, he is as much a natural being as the savage who lives in a cave, and hunts for his food. Nay he may be said to be more natural; because he is carrying forward his natural endowments towards perfection, in a far higher degree. Bacon and Newton, by the exercise of their extraordinary natural faculties for the advantage of mankind, were, at least, as strictly natural men as the savage of our woods, who lives in a continual war of offence or defence; and the farmer who cultivates the soil after the most approved method, is in as natural a state as the savage who eats the spontaneous fruits of the woods, without the labor of cultivation. The beaver constructs dams across rivers, and builds houses; but he is as natural as the fox which does neither. The hive-bee has a government, and constructs combs to contain his food, providently collected and stored; and its condition is as natural as the fly which does neither. The republican weaver, or social bird of Africa, builds large cities, furnished with streets and private

habitations, conveniently and comfortably arranged; yet these birds are in a natural condition as well as the cuckoo which neither builds a nest, nor incubates. Man builds cities and ships; ploughs and sows; calculates the distances and revolutions of other worlds; investigates the laws impressed by the Creator on his works, and his own organic and spiritual nature; yet he is as much in a natural condition as the beaver, the bee, and the social bird; and will be when his knowledge shall have reached, if ever, the utmost bounds within the circle of his nature. In short no improvement can be made by man, inconsistent with his nature, because it would be none if it were contrary to it, for it would not be in harmony with his being. If we are not correct, who will tell us where the natural man ends and the artificial begins? Does it end when he makes a voyage in a bark canoe, instead of on a log found in the water? Or when he ceases to clothe himself in skins, or to clothe himself at all?

It must not be forgotten that all the improvements of man, in his moral and intellectual endowments, are the results of his own contrivances, his own energies, his own will. If they were the results of the agency of a higher race of beings, forcing his nature to a conformity with their natures and interests, his condition would be artificial.

We are now prepared to ask the question of the reader proposed at the head of our chapter—"Whether the differences of physical organization, and of moral and intellectual qualities which characterize the several races of men, are analogous in kind and degree to those which distinguish the breeds of

domestic animals, and must therefore be accounted for accordingly ?"

We have examined the proposition in all its parts, and can find no analogy in any of the particulars mentioned, which will, in the least, assist us in the natural history of man. We have examined it under all the aspects we could imagine, because these animal analogies have been used in all shapes and for all purposes; now in a strictly scientific form; again in a speculative form; and lastly, in a supposititious form, founded upon a supposed resemblance. The general, and professed form is the speculative. It has been taken for granted, for it has never been proved, that all domestic animals undergo modifications of organization and instinct by domestication. It is itself an inference from analogy; a probable one we grant, but by no means certain, although we have granted it. Founded upon this speculation these authors have singularly leaped upon a conclusion which has no relation to it, viz., that domestication of animals and the civilization of men are analogous in their influences upon the respective beings;—an assumption contradicted by all history, sacred and profane, and by the current knowledge of our own day. The white man is the same physically, in the Caucasian mountains, living in a semi-barbarous state, as he is in the United States with all the known appurtenances of civilization; and the negro is the same physically, in Guinea, and other parts of Africa, where he enjoys all the liberty of his sun and sands, his dangers and privations, as he is in the United States, where he suffers under the civilization of a temperate climate,

fruitful soil, good shelter, and wholesome and regular food.

We have been liberal with definitions in this chapter, under a full sense of the danger incurred by their use. As a mere disputant we would have avoided them; which, perhaps, might have been politic as an inquirer after truth. But we love no theory which has not intrinsic merit; no inquiry that will not sustain a thorough investigation; and no argument which requires the constant policy of the advocate or diplomatist.

CHAPTER IX.

THE ANATOMICAL AND PHYSIOLOGICAL STRUCTURE AND FUNCTIONS OF THE DIFFERENT RACES OF MEN ARE SUFFICIENT TO CONSTITUTE DISTINCT SPECIES.

The importance of anatomy to natural history must be admitted by all who are in the least acquainted with the labors of the illustrious Cuvier and others, his contemporaries and successors, in this department of science. Comparative anatomy is founded on the fact that all the classes, orders, genera, and species of animals are different in structure, in a greater or less degree. It is, therefore, an

essential element of knowledge to the truly scientific naturalist. It is, however, of different degrees of importance, according to the subjects to which the naturalist directs his attention. It is indispensably necessary to him who investigates fossil remains; important to him who confines his studies to the living animal kingdom; and it is a convenient and useful aid to him who investigates the natural history of man. Whether we are absolutely correct in this comparison of the importance of comparative anatomy, or not, we are not certain. But we are very certain that too much importance has been given to it, by some anatomists, especially in the natural history of man. Our design in instituting the comparison will be apparent in the sequel.

In regard to fossil remains, nothing could be known of them without the assistance of comparative anatomy. It is amusing to notice the errors into which some of our learned ancestors fell, upon the discovery of some of the molar teeth of the mastodon, on the banks of the Hudson river. They were regarded as human teeth. Speculations were formed, in regard to the size of the men, about whom there were a variety of opinions; but all agreed that our continent must, at some remote period, have been peopled by a race of enormous giants. Some set their wits to work to discover when they were created. Fortunately for their theory, they fell upon a speculation of some ancient Jewish doctors, that, in old times, some evil spirits intermarried with the daughters of men, from which union giants arose. Comparative anatomy has put all such speculations to rest. It has clearly demon-

strated a state of the world prior to the creation of man, at which period enormous animals, many of them wholly different from those now existing, were abundant and common. This department of natural history belongs exclusively to the comparative anatomist. But in regard to existing races of animals, the comparative anatomist is not quite so supremely exclusive. Here a naturalist may, by close attention and accurate observation, build up a very useful natural history without his aid; nay, the anatomist must have had the aid of the naturalist, before he could know that certain organic structure was always followed by certain peculiar habits, instincts, &c.; without which his dissections could not be directed to an object. Had not Linnæus and others preceded him, Cuvier could not have perfected his illustrious work. Comparative anatomy, therefore, is not the foundation of natural, as it is of fossil history, but the reverse. Although it did not found the science, it has made it more exact, and therefore more useful.

Anatomy, and its daughter, animal physiology, are surprisingly correct in the classification of animals; because an anatomical examination of them exhibits to the skilful anatomist the peculiar organization and functions which give rise to specific, generic, and other instincts and habits. This is not the case with man with the same certainty; because the nature of man is not fully exhibited by his instincts and habits. By far the most important part of his nature—that which makes him peculiarly the creature he is, which has placed him at the head of creation in this world, cannot be disclosed by his organization, how-

ever skilful the operator may be. The anatomist and physiologist can do no more than to investigate man's animal structures and functions, leaving his intellectual constitution unexplored. We use the word physiology in its restricted and proper sense, and not as comprehensively as those who have written upon man. Physiology treats of the *functions* of the animal economy, performed by certain organs; which functions consist of *contractility* of the muscular, and *sensibility* of the nervous systems. As sensibility is not always followed by perception, it is properly divided into *sensation*, or animal feelings—and *perception*, or mental feelings. These are legitimate objects of physiology, disclosed by organization; but these are not all which constitute a man, although they are all which constitute an animal. Man reasons upon, compares, speculates, and performs various operations of the mind in relation to these perceptions, which are wholly distinct from, and not at all necessary consequences of them. The human mind can act as well with as without such perceptions; which is evident because the mind reasons as clearly and distinctly upon a supposed proposition, a mere abstraction, which never happened to the individual, as it can about any matter made known through the medium of the senses.

If we are not right, what anatomical and physiological phenomena constitute the difference between the human and animal mind? Philosophers have imagined a time when man was a mere animal, with no language but cries and interjections—the mere chattering and exclamations of monkeys. If so, must he not then have possessed a mind, or a mental

constitution—some attribute different from any known animal? If not, how could he separate himself from them all by an art which none have been able to imitate with the example before them?

From the earliest ages to the present time, philosophers have, in their investigations of the natural history of man, regarded him merely as an animal; consequently they have searched for his peculiar distinctive characteristics in his external form and internal organization. Every little peculiarity, important and unimportant, in which a supposed, or real difference exists between man and animals, has been seized upon, and magnified as peculiar and noble distinctions of the lord of this world. "His upright stature—that majestic attitude, which announces his superiority over all the other inhabitants of the globe."—"Enslaved to their senses, and partaking merely of physical enjoyments, other animals have their heads directed towards the earth."—"Man, whose more elevated nature is connected to surrounding objects by moral relations, who can pursue the concatenations of causes and effects, and embrace in his mind the system of the universe, boldly regards the heavens, and can direct his sight even into the starry regions." Such has been the language of philosophers time out of mind. No doubt our remarkably convenient attitude and figure are causes for thankfulness; because they are suited to our natures, precisely as other attitudes and figures are suited to other natures. But it is a little unfair in our great men, to boast of physical advantages over animals which have not the power of defending their prone conveniencies and advantages.

The game cock might, with equal propriety, claim to be superior to "all other inhabitants of the globe," if erect stature and noble bearing are titles to the distinction. Buonaparte, after his most successful campaign, never exhibited more majesty, more grace, more noble defiance, in his every movement and action, than the noble bird. And the owl, too, perpendicular as a Prussian grenadier, a philosopher in gravity, if not in wisdom, might claim to divide the empire of the world with man, if the erect attitude formed any part of the title to such supremacy.

Much labor has been bestowed by philosophers to show that the erect attitude does not belong to monkeys, and particularly apes; which last have been particularly objects of fear to them, lest they should become Scotch cousins. The anatomist has exhausted his art to show that, from the form of the pelvis, and other peculiarities, they were not designed for this exalted position, and mode of progression. The truth is, if man had been of any form, or attitude—like the ape, elephant, kangaroo, hog, or worse,—if he had the mind which now peculiarly distinguishes him,—his self complacency would discover, in such form and attitude, precisely the thing which constituted him the lord of all. If, with the monkey, he had four hands, instead of two, he would no doubt boast of them. If to these were added the proboscis of the elephant, what a convenience! and yet again, if a prehensile tail were added, it would be admirable for an infinite variety of purposes!!

Laborious and precise as the researches of the anatomist have been, to display, by his art, that man is not a quadruped, nor a quadrumanous animal, his

labors have been greater to show that the peculiar characteristics of his mind owe their distinctive traits to the peculiar formation, and comparatively large mass of the human brain. In this they have signally failed. The peculiarity which distinguishes the human, from the animal brain has not yet been exhibited. It has eluded all the research of the materialist, of the naturalist, who depends on the knife to disclose all the secrets of animal nature. And yet, although it cannot be exhibited, who that has his senses doubts of the fact, that the mind of man differs from that of an animal in all of its most important features?

The head is divided into two parts, the skull and the face. The first contains the brains; the last the external organs of hearing, seeing, tasting, and smelling exclusively; and the sense of feeling, in common with other parts of the body. Taking capacity and form of the skull as chief signs of the power and extent of the mind; and the size and form of the external organs of the senses to indicate the power of the animal propensities and passions, it would not be difficult to assign to each individual of the human family his true mental position. But there is, necessarily, a mutual relation of these distinct parts; that is, a very large skull cannot be imposed upon a very small face without being preternatural. Consequently, there must be a certain relative proportion of these parts, to constitute the intimate agreement which may be called the standard of perfection. It is a general, if not a universal rule, that an oval face is accompanied by a larger proportional development of the anterior brain, or cere-

brum, as compared with the posterior brain, or cerebellum; and, on the contrary, a large face, having of course, all the sensual organs correspondingly large, is accompanied by a large development of the posterior, compared with the anterior brain. There is no part of the brain so important, in regard to intellectual power, as the fore part, or forehead; the part designated by phrenologists as the seat of the reflecting faculties. It is more especially here that the greatest variations in the skulls of the different species of men are observable.

It is from a knowledge of these truths that a mode has been adopted to measure the intellectual power of men by what is called the facial angle; that is, a line drawn from the superior middle part of the forehead to the margin of the superior alveolar process below the nose; from which a line is drawn horizontally, and the angle formed is the facial angle. Of course this angle will approach to a right angle, in proportion to the development of the forehead, compared with the face: consequently the nearer it approaches to a right angle, the greater will be the intellectual power, compared with the animal propensities. If this were accurately true, in a generality of cases, the phrenological division of the skull into separate and distinct intellectual organs must be wrong; because a single line which touches only the organs of comparison, eventuality, and individuality, would give the whole intellectual power of the individual, independently of the other organs. But it is only an approximation to the truth, sufficiently near to give a general view of the hu-

man family, which can only be relied upon in well marked examples.

That the facial angle is not a correct test of intellectual power, is evident from the fact that several of the simiæ exhibit as great an angle as most negroes; whereas no man in his senses can believe that the most intellectual ape is to be compared, in the power of his intellect, to the most sensual negro. The difference in the *quality* of the brain, between human and animal subjects, has, no doubt, great influence upon their respective mental power. But, apart from this consideration, the facial angle does not appear to be more accurate when applied to animals, in which the difference of quality cannot be supposed to have much influence. The horse, according to Cuvier, has only an angle of 23 deg.; while an orang utang has an angle of 67 deg.;—a greater difference than prevails between the most highly gifted Shemite, and the lowest Canaanite. The horse, according to the angle, should be stupidity personified, and the orang the most intellectual of quadupeds; both of which are untrue.

From a review of all the facts relating to the facial angle which have come to our knowledge, we think it may be stated, as a general rule, not without many exceptions, that it is of very little value as a measure of intellect, when animals of different species are compared with the standard of another species; but that it affords a general approximation to the truth when animals of the same species are compared with a standard angle in that species. This indicates, what might be expected to be true, that animals of distinct species are organically, or chemical-

ly different in the medullary substance, although it may not be detected by the anatomist, or chemist.

It was for a long time believed that man had the largest brain of any animal; but this, although generally true, is not without so many exceptions as to make the rule unsatisfactory. Subsequently the relative mass of the brain, compared to the whole weight of the body, seemed to offer the criterion of the relative power of the intellect. This, also, was soon abandoned, as it furnished many examples contrary to established facts. The next theory proposed was "the ratio which the mass of the brain bears to the bulk of the nerves arising from it;"—in which it was supposed that a large brain having fewer or smaller nerves proceeding from it, compared with another must be more intellectual.

In regard to all these theories we beg leave to transcribe the observations of Mr. Lawrence, Lect., page 170, et seq., because of his acknowledged qualification to judge of their merits.

"It must be acknowledged," says he, "that the inquiries into the relative weight of the brain and body, and the comparison between the former and the nerves connected with it, have not yet afforded any precise and clear information respecting the differences between man and animals, nor on the grounds of the infinitely various faculties that distinguish different animals. It can hardly be expected that these matters will receive any clear elucidation, while we continue so ignorant as at present of the functions executed by different parts of the encephalon.

"The basis of the position so much insisted on by

Sœmmering, is an assumption that a certain bulk of nerve requires always the same proportion of brain for the execution of its office—a datum by no means self evident. The comparison of the nerves to the brain in general is not satisfactory: we should wish to know the relative proportions of the cerebrum, cerebellum, and medulla oblongata. The latter indeed is an important point; as most of the nerves are immediately connected with it, few with the cerebrum, and none with the cerebellum, properly so called.

"The most striking character of the human brain is the prodigious development of the cerebral hemispheres, to which no animal, whatever ratio its whole encephalon may bear to its body, affords any parallel.

"It is also the most perfect in the number and development of its parts; none being found in any animal, which man has not; while several found in man are either reduced in size, or deficient, in various animals. Hence it has been said, that by taking away, diminishing, or changing proportions, you might form, from the human brain, that of any animal; while, on the contrary, there is none from which you could in like manner construct the brain of man.

"It approaches more nearly to the spherical form. That the nerves are the smallest, in proportion to the brain, has been already pointed out: the brain diminishes, and the nerves increase, from man downwards. In the fœtus and the child the nerves are proportionally larger than in the adult.

"The assertion that it has the largest cerebrum in

proportion to the cerebellum does not seem to be quite correct. It has, however, the largest cerebrum in proportion to the medulla oblongata and spinalis, with the single, and indeed singular exception of the dolphin.

"It has the deepest and most numerous convolutions, apparently in consequence of its size, as the purpose of this structure seems to be that of affording a more extensive surface for the application of the vascular membrane, the pia mater. The convolutions become fewer and shallower as the brain diminishes in size: there are none in the rodentia; none in very small brains.

"It has the greatest quantity of medullary substance in proportion to the cortical. In the fœtus, the cortical is much more abundant than in the adult.

"Sœmmering has shown that the curious structure, the sandy or earthy matter of the pineal gland belongs to the healthy natural state of the human brain, being found from the fourteenth year; and that it is almost confined to man. He found it, however, once in the fallow deer; and Malacarne met with it in a goat. An instance communicated by Caldani, of an old man in whose brain it was deficient, is regarded by Blumenbach as a rare anomaly of structure."

We think it highly probable that this sandy matter in the pineal gland is the evidence of virility in man, and of the sexual season in animals. In these last, its presence may mark the season, and its absence the reverse. For obvious reasons it would be constantly present in man, under ordinary cir-

cumstances. The truth may be easily ascertained, if it should be examined; for which purpose, and not for any supposed application to our subject, we have mentioned it.

We have made this lengthy extract from Lawrence, to show how utterly impossible it is for the anatomist and physiologist to produce any rational theory of the distinctive causes of the human intellect. Whatever course they take to demonstrate its peculiar human properties,—by the facial angle they are opposed by apes;—by the mass of the brain by elephants;—by the weight of the brain compared with the body, by monkeys and canary birds;—by the comparative size of the cerebrum to the medulla oblongata, by the dolphin;—by the sandy matter of the pineal gland, by the fallow deer and goat;—we say, whatever road they travel, they are encountered and driven back by some animal, marine or terrestrial, which they have not the means to overcome.

The difficulty is that these philosophers have always sought for a universal principle applicable to all animals, wthout regarding the differences of functions, more particularly than anatomy, in kind as well as degree of the beings intended to be grouped in the same mental family. The disposition of the human mind to generalize is almost irresistible. It presses upon us at every step. If there is any one principle which, more than any other indicates a truly great, from a medium mind, it consists in an ability to resist the temptations to generalize, and to concentrate the whole power of the intellect on a single point.

Phrenologists, connecting anatomy and physi-

ology with a close observation of human nature, have made a nearer approach to the means of judging of the various properties of the human mind. We have never been convinced that the minute divisions of the brain into distinct organs are correct; but we are satisfied the chief divisions into moral, intellectual, and animal, are well established. Proceeding strictly upon the inductive method of philosophizing, they have attempted to build up a science of the mind by observing the manifestations of particular traits in individuals, and then observing the shape of the skull corresponding with the traits of character: thus making the anatomy of the brain subordinate to observations of character. The method is correct; but we will see hereafter that the process of applying it may be questioned.

We have said that we are convinced that the chief divisions of the human skull into moral, intellectual and animal are correct. The vertex exhibits the moral, the forehead the mental, and the back of the head the animal qualities, powers, and propensities. If asked, why we believe this? we answer, we know no physiological facts to justify it, and rest it entirely on observation. Craniology is founded on these, as natural divisions of the brain, resting solely on the authority of general assent, and not on any known physiological facts. It is only on this principle that the classification of the races of men by their crania has any importance.

But although we believe these divisions to be generally, they can by no means be considered as universally, true. They should be received with numerous exceptions.

These exceptions increase in number and importance, and of course the rule is weakened, in proportion as the species compared recede from each other. Suppose, for example, our rule to be founded upon observations made on the European species of men, to whom it will apply generally. It should not be inferred that it will as generally apply to the Chinese, whose natures, and of course, functions, are different. It might require a considerable modification to make it apply as generally to them; and it might again require other modifications when applied to Africans. These being all human subjects, the rule, though requiring modifications to adapt it to specific differences, may, in some degree, be applicable to the whole genus; but, if we should depart further from the original type giving rise to the rule, we discover immediately that, under any modifications, it is altogether inapplicable. To the orang, for instance, it is wholly inappropriate; for although his moral region of the skull is proportionably as large as that of the African, especially in the young subject (we might say larger), yet he is entirely destitute of a moral sense.

But the mere capacity and shape of the cranium are by no means the only things to be taken into consideration. The *quality* of the brain is a highly important item, without attention to which a very imperfect idea of the power of the intellect can be formed. Important as mass is, it is not everything. "But after all," says Smith, in his excellent discourses, already quoted, "little is the necessary connection, between either the shape or the bulk of the brain, and the intelligence of the individual." He

furnishes several examples of individuals with heads so small as to be subjects of remark, and frequently of ridicule: one of them "with some eccentricity, was endowed with talents much above the common order, and another was distinguished for good sense, and devoid of peculiarities, either positive or negative." On page 130, he states his belief as follows: "If we compare a great number of persons having big heads, with an equal number much less amply provided in that particular, *all of whom belong to the same race*, live in the same society, and have been trained and educated, as far as possible, alike, then will the aggregate talents of the former exceed those of the latter. Under other circumstances, or between individual and individual, mere bulk of head, within ordinary limits, is an element of no appreciable importance." The learned lecturer, although he may not have intended it, more than intimates that any rule established for one species, by which to judge of the extent of the mind, is, properly, only applicable to those who "belong to the same race" —the same species. This subject will be repeatedly illustrated in our future remarks, and need not now detain us.

All the causes that give quality to the brain, which distinguish the power of one brain from another, are unknown. The anatomical and physiological arrangement, and functions of the *encephalos* are the most difficult, and least understood branches of science relating to the human system. Eighty per centum of it is said to be pure water. The remaining twenty per cent., with the medullary substance, constitutes the fibrous net-work, which, in complexity

and involutions, defies scrutiny. The nerves, which it sends off to every part of the system, partake of its complexity, run in every direction, assuming different shapes, sizes, positions and flexures, apparently without order, design, or use; at times uniting, and again dividing, and pursuing a tortuous course to their destinations. All this, to us unaccountable apparent caprice and complexity, undoubtedly proceed upon certain invariable laws, operating with design to produce certain effects. It may be that individual character may depend somewhat upon a variation of position, size, shape, inflexion, union or disunion of particular chords or fibres of the *encephalos* or nerves, or both; so slight as not to have been observed, or too slight and intricate for observation.

That mere mass alone of cerebral matter does not confer all the intellectual power, is evident from the fact that the human brain acquires its maximum size at a very early age, during childhood; that the mind is much, speedily, and surprisingly increased, at and immediately after the age of puberty; and lastly, that at a future age, say from twenty to forty, varying in different constitutions, it arrives at its maximum power. There is something therefore in the human constitution, in the nature of man, besides the mass of brain—something added in its progress to maturity, as it were at distinct periods, arising from particular states of the constitution, which bestows power exclusive of structure, but dependent on functions. It evidently depends, in some degree, upon the functional modifications at the different periods. These functional modifications are called *temperaments* by modern physiologists. Dr. Smith,

in his "Select Discourses," defines function thus: "The function of a part, whatsoever that function may be, is always proportioned to its bulk, and the greater or less supply of aerated blood which it may receive, unless the afflux of that fluid be so redundant as to be suffocating, or so long continued as to become exhausting."

This may be true as it regards the *cause* of function; but the *effects* of function, which appear to be more nearly related to the phenomena of mind, appear to depend, either upon the balance of all, or a preponderance of some, or one of the vital functions. In early childhood, before the age of puberty, the determination of blood to the brain is considerably greater than at any later period; and the fine nervous chords are distributed more abundantly to every part of the system. Notwithstanding this comparative increased sensibility of the whole sensitive being, the power of the mind is deficient, not so much by reason of the absence of experience, as the undue preponderance of cerebral sensibility and excitement. At this period the lungs have not expanded to their full dimensions, and therefore have not the capacity to aerate, or oxidate the blood to the same degree; which then contains more serous, and less coagulable matter, than after puberty. But after puberty, when much of the blood is diverted from the brain to supply the new demand of the system—when the lungs have fully expanded, say from the age of twenty-one to twenty-five, the mind, except in some few rare cases of precocity, has not yet arrived at maturity: nor does it generally, until between the ages of thirty-five and forty-five. From the age of puberty

an absorption of many of the smaller nervous chords, so innumerable and important in early childhood, is constantly progressing. Whether the maximum of mental power arises from the equal adjustment of all these causes, or a prevailing predominance of one of them, is a question we are not prepared to answer. It appears to be so; for as the nervous absorption progresses with age, when it has reached a certain point, the mind diminishes in power with the decrease of sensibility, until senility carries it into second childhood. This adjustment, or balance, or this preponderance of vital functions in the system, indicates what is called *temperament.*

Constitutional temperaments have been long regarded as important influences upon the human mind. Although modern physiologists have discarded the four cardinal humors of the ancients, the balance of all, or predominance of one of which constituted the temperament, they have found it proper, because it is natural, to preserve the theory, to denote the peculiarity of constitution arising from the functional activity of certain vital organs to modify, or give character to individuals.

We reserve for the future any remarks in relation to the constitutional temperaments of individuals, or classes of the same species; but this is the proper place to notice the vast disparity between the different species arising from this cause. Suppose the capacity and shape of the skulls to be identical, the constitutional temperaments of the different species forbid the belief that they can have identical, or even similar mental powers. If the sanguine, bilious, and other constitutional temperaments of indi-

viduals of the same species, produce appreciable mental and physical differences, for a stronger reason should the specific temperaments of the different races of men produce greater mental and physical differences.

In respect to the white, or Shemitic species, names have been applied sufficiently accurate to distinguish the temperaments characteristic of the several constitutional diversities. But no such names have yet been invented to distinguish the different species from each other. Sanguine, bilious, &c., will not answer the purpose; because these words have been already appropriated to distinguish the constitutional varieties which prevail among persons of the same species, and often of the same family. Besides, the specific constitutional differences between the species of men, must arise from other, and higher causes, than the constitutional modifications of the same species. Nor would it be consistent with known physiological facts, to infer, that because the bilious temperament in the Shemitic race is always accompanied by a darker hue of the skin than the sanguine, therefore the still deeper color of the dark races is an evidence of an increased bilious temperament, until it arrived at the atrabilious point in the Negro. On the contrary, we think it probable that the Negro constitution is not, in general, as bilious as that of the white race; certainly not more, or they would be liable to bilious disorders, at least in an equal degree.

We will endeavor to supply this defect by names which will distinguish the races, similar to the

manner by which individuals of the same race are distinguished by their temperament.

The Shemitic, or white species is, collectively, distinguished by a *strenuous* temperament;—a mental and physical constitution active, bold, vehement, persevering and vigorous. This temperament is prominently marked upon the history of the race.

The Japhethic species is distinguished by a *passive* temperament, which is expressive of the known quiet and passive temper of the yellow race. The Chinese and Japanese, the most numerous of this race, have exhibited the passive character time out of mind. If the Mongols are entitled to the credit of all the horrors committed in their name, which we know they are not, it was only a sudden, but truly devouring flame, which was extinguished in a comparatively short time. Of the three terrific scourges of Asia and part of Europe, who have been generally called Mongols, Zingis is the only one of Mongolian origin. Attila was a Hun, and Timour, the Tartar, overthrew the Mongolian dynasty of Zingis, and became master of most of his empire. The temporary violences of the Mongols are only exceptions to the general habits of the race, and were, probably, caused by the vicinity and mixture of the ever restless, roving, and ruthless Ishmaelites, by whom they are bounded on the west and northwest.

The *callous* temperament is characteristic of the Ishmaelitic species. On the first view it may appear improper to designate the roving, predatory, and destructive characters of the Tartars, and their probable descendants, the American Indians, by a word ex-

pressive of insensibility; but it is the best appellation we can think of, and is sufficiently descriptive. Coolness, command of temper, and gravity,—long concealed, unappeasable revenge;—insensibility to the sufferings of themselves, or others;—unexcitable by every thing but plunder or blood;—are the peculiar characteristics of the Ishmaelites of Asia and America. The extreme examples of this callous temperament are exhibited by our Indians. Their fortitude and apparent insensibility under tortures the most excruciating that can be imagined;—sing ing death songs, and provoking songs of triumph, while burning in a hundred places by splinters stuck in their flesh, and set on fire by their tormentors;—are not all to be credited to their heroism. Insensibility claims a large share. "His hand shall be against every man, and every man's hand against him," is not more remarkable in its exact fulfilment, than in the peculiarly callous temperament bestowed upon the race, to fit them for their destiny.

To the Canaanites we have given a *sluggish* temperament; signifying that peculiar insensibility which physicians technically designate by torpor. This temperament is eminently characteristic of the whole race, and seems to be peculiarly applicable to them as the "servant of servants." We are aware of the fact that the Canaanites, in the Promised Land, were of a different character, and were eminently commercial and industrious for that period; but they furnish the only example upon record of an exception to the sluggish temperament in their race. Exceptions, if not numerous, and especially a single one, rather strengthen than weaken a rule. Perhaps they were

indebted for this temporary exemption from the curse to furnish a striking evidence of its fulfilment, by being driven to their final destinations in Africa and Oceanica, after which they sank to the standard of their race.

If we are right in the names we have given to the different species of men, it must be evident that mere mass and form of brain, in the species, one compared with another, are certainly not the only, if they are the chief distinctive characteristics of them in regard to intellectual power. We know that mere mass and form are not the only signs of intellectual power in the white species; for equal masses and forms of the brain, of sanguine and bilious individuals, will have decidedly different mental powers; insomuch that the dogged perseverance of the bilious temperament to carry every action and thought to its utmost stretch, is strongly contrasted with the variable impulses, and apparently intuitive decisions of the sanguine temperament. Such being the fact in the same race, by those slight constitutional differences, which appear to be wisely ordained to avoid what is technically called "in and in" alliances, how much stronger is the influence of such a constitutional difference as amounts to a difference of species? Take, for example, the two species which approach each other the nearest in mental results,—the Shemitic distinguished by the strenuous, and the Japhethic by the passive temperaments; what an immense difference of intellectual power becomes manifest; too great to be accounted for by the difference of formation and capacity of the skull. But a comparison of the Japhethic

passive, and the Ishmaelitic callous temperaments, may be more striking and illustrative; because it is universally acknowledged that the Bedouins and Tartars have decidedly the best formed, and most capacious crania; consequently, according to received theories, these Bedouins and Tartars should have decidedly the best intellects. Is it the truth? Take the whole circle of the useful and ornamental arts and sciences, and which has the advantage? Except in astronomy and geography, both of which are incidents of the roving, predatory habits of the Ishmaelites;—and excepting their religion, derived from the Jews, and corrupted to suit their sensual and predatory habits;—the Ishmaelites compare very unfavorably with the Japhethites. They both appear to have arrived at their ultimate capability of improvement: but the Ishmaelites have stopped short of the point gained by the descendants of Japheth. These were to "increase and multiply;" and the passive temperament, and the arts and sciences belonging to such a temperament, appear to have been given that the fiat should be fulfilled.

In respect to the variety of constitutional temperaments in the different races of mankind, we think it highly probable, and we mention it that it may receive attention by those who are curious in the natural history of man, that they are more strongly marked, and are of greater variety in the Shemitic or white race, than in any others. We are led to this belief by the fact, as we will attempt to show hereafter, that the increased progressive mental capability of the Shemitic species is chiefly to be attributed to judicious crosses of temperaments by intermarriages,

which lead to the perfection of the species. The temperaments of the Shemites are obvious to the eye—contribute much to the personal beauty of individuals, and have a considerable influence over the selection of partners in marriage; but in the dark races, in proportion to the depth of color, the temperaments are not apparent to the eye, and therefore exercise very little influence in intermarriages. It is evident, therefore, that the advantages of crosses of temperaments in the dark races, are not items of importance in the same degree they are with the Shemites. That individuals of the dark races have some differences of constitutional temperament, we do not doubt; but the very apparent uniformity of character, one compared with another, of the Japhethic, Ishmaelitic, and Canaanitic races, as compared with the very strongly marked characteristic differences in the Shemitic family seem to imply a less varied, and less decided difference of constitutional temperaments. Take for instance, the example of the Chinese, who exhibit a very striking example of conformity of each individual to the manners, habits, thoughts, and moral sentiments of every other individual of the nation. Turn to the American Indians, and their peculiarities are so strikingly apparent, that some close observers have remarked, that to see one tribe, is to see the whole. Observe the Negroes of Africa, and the same general traits characterize them all. Now turn to Europe, and count, if you can, the endless variety of constitutional temperaments exhibited by combining, in various degrees or ratios, the sanguine, the bilious, the melancholic, the nervous, and the lymphatic, with one another, and with some sub-

varieties, as the athletic, &c.; and observe the endless variety of features and of mental power;—and of disposition, gay, cheerful, or grave, exhibited by the Shemitic, as contrasted with every other species. We make no doubt, that each species has every variety of temperament; but perhaps not all of them in the same high degree as the Shemitic; or perhaps they are chiefly deficient in the sanguine and nervous temperaments, which may be the cause of their general deficiency of intellectual sprightliness and vivacity. We will discover probable cause for this supposition presently.

We have already alluded to the fact, that all the dark races have less nervous sensibility than the white. This is a clearly established fact; but whether there is a gradation of nervous sensibility, according to the degrees of comparison, dark, darker, darkest, is a question yet to be settled. From analogy we should say there is; but inferences from analogy are not safely to be trusted in regard to things in which we know there is a specific natural difference of organization, and therefore a modified organic function. So far as the facts are known to us, there appears to be very little difference between the nervous sensibility of any of the dark races. The Ishmaelites certainly appear, in this respect, to be as obtuse as the Canaanites. Compared with the Shemitic species, all of the dark races appear to be of decidedly inferior sensibility; but compared with one another, we should be at a loss to decide the matter. This question must remain open for future physiological research, and its inves-

tigation may unfold some curious and important facts in the natural history of mankind.

A remarkable difference in the anatomy of the skin of the different species of men, has been long known; but has never, that we know of, been regarded by physiologists as having any influence upon sensibility. The skin of the white race consists of two parts only, viz.: the scarf skin, and the true skin; whereas, the skin of the Negro consists of three parts, viz.: the scarf skin, the *rete mucosum*, and the true skin. Notwithstanding the disputes among the learned, in regard to this intervening reticular substance, we regard the matter as settled, that there is no discoverable *rete mucosum* in the Shemitic species; and that it exists in the Negro, and may be exhibited by dissection. "When a blister has been applied to the skin of a Negro," says Cruikshank, "if it has not been very stimulating, in twelve hours after, a thin, greyish, transparent membrane is raised, under which we find a fluid. This membrane is the cuticle, or scarf skin. When this, with the fluid, is removed, the surface under these appears black; but if the blister had been very stimulating, another membrane, in which this black color resides, would also have been raised with the cuticle. This is the *rete mucosum*, which is itself double, consisting of another transparent grey membrane, and of a black web, very much resembling the *pigmentum nigrum* of the eye. When this membrane is removed, the surface of the true skin, as has been hitherto believed, comes in view, and is white like that of a European. The *rete mucosum* gives the color to the skin."

"I have stated elsewhere," says Mr. Lawrence,

Lect. 240, "that the demonstration of this reticular body is much less easy in the white races than in the Negro; *and indeed very little seems to be known concerning its anatomy in the former;* and further that it seems really to be a matter of doubt, whether in the white races there be *any coloring matter in the exterior capillary system analogous to the black substance in the Negro*, or whether the color of their surface arise merely from that of the cuticle and cutis. When the cuticle separates by putrefaction from the cutis, the surfaces are moistened by a putrid offensive fluid; but I could never *detach any thing like a distinct membrane, even in the smallest portion.*" The late Dr. Gordon came to a similar conclusion from his investigation of the subject. "After the strictest examination I have not been able to find any light colored *rete mucosum*," says Dr. Gordon, "corresponding to this black one, in the inhabitants of Great Britain, nor in those of any other nations resembling them in color. I have tried all the means usually said to be necessary for discovering it, and *many others besides, but always without success: I am, therefore, disposed to deny the existence of any such membrane in white persons.*"

All anatomists agree, that the rete mucosum is not demonstrable in the white, but is in the dark races; but some contend, reasoning entirely from analogy, that it is not absent in any of the races of men, except in the true Albino; apparently an absurd hypothesis, being directly contrary to the strictest examination, and the most delicate exertions of anatomical skill.

In order to understand the probable influence of

the rete mucosum to modify sensibility, it is necessary to attend to the organization of the three skins, to find where sensation first commences.

The cuticle, epidermis, or scarf skin, is an insensible membrane, and was designed merely as a cover for the true skin. "It presents" (Lawrence, Lect. 238–9) "no traces of fibres, laminæ, or cells; *it has no absorbents, blood vessels, or nerves.* Therefore, though perforated by the hairs, by the excretory tubes of cutaneous follicles, by the exhalant mouths of the capillaries, and possibly by absorbent orifices, *it is incapable of sensation and all vital actions, extravascular, inorganic.* It is a protecting sheath for the finely organized and sensible skin; and serves the purpose of preventing evaporation, by which that organ would otherwise be inevitably dried. *Thus the external surface of our living machine is in a manner dead; and objects applied to it act on the cuticular nerves through this insensible medium.*"

The same author, speaking of the *rete mucosum*, says, "It is a black layer interposed between the cuticle and cutis, about as *thick as the cuticle itself*, or *even thicker in the Negro;* and darker colored on its dermoid than on its cuticular surface. Putrefaction detaches it with the cuticle from the subjacent cutis; its further progress resolves the soft tissue into a kind of unctuous slimy matter, readily washed away from the cuticle and skin. It is not easily separated from the former: indeed it is, under all circumstances, very difficult, and where the skin is delicate quite impossible, to exhibit it detached, in any considerable portion, as a distinct membrane.

It agrees with the cuticle, in showing nothing like fibrous texture; in being inorganic and extra-vascular."

We now come to the cutis, or true skin, placed immediately in contact with, and under the scarf skin of the white species; and in contact with, and under the *rete mucosum* of the dark races. We again quote from the same author, p. 237: "It is a compact and strong areolar tissue, composed of a dense *fibrous* substance, with numerous vacuities or intervals." It "is permeated in every direction by countless myriads of arterial and venous ramifications, of which the ultimate capillary divisions occupy the external or compact surface of the organ, and form a vascular net work over the whole body, eluding our inquiries, and defying our calculation by the number and fineness of its tubes. Their ramifications are particularly numerous and subtle in those parts of the cutaneous organ which possess the most exquisite sensibility; and where the surface is found, on minute examination, to be covered by numerous fine processes called papillæ or villi. *Numerous nerves enter it in all parts, and distribute their largest ramifications in the situations occupied by the papilæ.*"

Having now a knowledge of the different parts of the skin, we are in some measure qualified to judge of their uses, and influence, in modifying sensibility. The important facts we learn from the above quotations, are: First—that the scarf skin is an inorganic, insensible integument, covering the vascular net work of the innumerable nerves which cover the surface of the true skin, by which all sensibility of external objects is derived. Secondly—that the use of this co-

vering is to prevent the drying of the surfaces of the nerves, and to prevent immediate contact with foreign bodies by the nerves, which would always be attended with pain, instead of that degree of sensibility which constitutes mere mental perception. The interposition of this inorganic, insensible scarf skin, between the highly sensitive nerves and external substances, is absolutely necessary to modify and blunt the sensibility of the nerves, upon the presentation of external substances to the action of the senses. Thirdly—that the Shemitic or white species of men, have no other interposing substance between external substances and the nervous system, but the scarf skin; consequently, that impressions are made upon the *nervous sensibility, with the least possible modification that the nature of the case will admit, consistent with sensibility of perception, unaccompanied by pain.*

Fourthly—that the dark races of men have another interposing integument, between the nervous expansions of the true skin and external substances, in addition to, and of equal insensibility with the scarf skin; as thick, and in the Negro, thicker, than the scarf skin. Fifthly—that this rete mucosum is a cellular substance, filled with an unctuous, black matter, closely adhering to the scarf skin, but easily detached from, and therefore but slightly attached to the nervous expansions occupying the surface of the true skin. Sixthly—that impressions are made upon the nerves, with more or less sensibility, according to the thickness, or the reverse, of the interposing integument between external substances and the nervous expansions on the external surface of the true skin.

These are all highly important circumstances to the physiologist, to enable him to decide the question of specific differences. Important as they are, they are probably of less importance than the intimate *sympathy* and important relations of the skin to the functional operations of some, if not all, of the vital organs. The internal surface of the alimentary canal, the thorax, &c., is only a continuation of the skin and its appendages. Hence *sympathy* is not the only pathological relation between them. But, abating this important fact, the reciprocal sympathetic influence of the skin and the internal vital organs, is abundantly sufficient for our purpose. We may say that most of the fatal disorders to which the human system is liable, make their first impressions upon the skin, and act upon the vital organs mediately by its instrumentality; or, if an internal organ should be primarily affected, the skin most frequently gives the premonitory symptom of its derangement. Hepatitis, dysentery, yellow fever, consumption,—in short, all tropical and climatic disorders, are more frequently induced by influences on the skin, than by any other cause.

But it is not only the presence of the *rete mucosum* in the dark races, and its interposition between the nerves and external objects, which must be estimated. This is only the effect of a deeper-seated cause. The secretory organs which deposit this black, unctuous, or dark colored substance, must have their origin internally, probably in the lacteals of the mesentery and thoracic duct, but most certainly in the process of sanguification. We say *must*, because, although we know of no comparative

analysis of the different bloods and biles, yet, not only the flesh, but the skin proper, or cutis, of the dark races has a deeper color, and the sensibility of the nerves is diminished from some cause,—probably in the substance, or enclosing membrane of the nerve.

Lawrence, speaking of the cutis, Lect., p. 239, says, "It is, on the whole, darker in the latter (the dark colored races) than in the former (the white), and possesses a grayish, or brownish tint."

Dr. Mosely, in his "*Treatise on Tropical Diseases*," says,—"The locked jaw appears to be a disease entirely of irritability. Negroes, who are more subject to it, whatever the cause may be, *are void of sensibility to a surprising degree. They are not subject to nervous diseases.* They sleep sound in every disease, nor does any mental disturbance ever keep them awake. *They bear chirurgical operations much better than white people;* and what would be the cause of insupportable pain to a white man, a Negro would almost disregard. I have amputated the legs of many Negroes, who have held the upper part of the limb themselves." It is probable that Negroes are more subject to this disease, only because they are more exposed to the causes,—changes of weather, punctures, and wounds,—which produce it; but most certainly not from greater nervous irritability or sensibility.

Although the above remarks apply to the Negro, it is well known they apply equally to all of the dark races, compared with the white. The American Indians are known to sustain tortures with comparative indifference, insupportable to a white man. So also is it with the Tartar, Hindoo, and Chinese.

These are the facts. Their application to a modification of sensibility of the different species, and their importance in the consideration of the question of specific difference of the races of men, are so evident that we are surprised the acute naturalists who have discussed the subject, only regarded the *rete mucosum* as influencing color, without any attention to, or notice of, its modification of functional action.

We have seen that the influence of the same substance which is concentrated in the *rete mucosum*, pervades the flesh or muscular part of the body, the cutis, and affects the sensibility of the nerves in parts subjacent to the surface of the cutis, and therefore beyond the direct influence of the rete mucosum, which is imposed upon the cutis. Is not the inference fair, though we cannot positively state the fact, that it equally affects the whole nervous system, the encephalos and its processes? Do not the mental manifestations of the different species of men, correspond with the degrees of this substance natural to them, from the Negro, in a regular series, up to the European? But let us suppose, for a moment, that it modifies sensibility in regard to external objects alone;—how innumerable are the ideas which would be affected by it? What a vast disparity of intellect must belong to beings having a specific difference in this respect, even if it were more trifling than we have reason to believe it to be?

It is evident then, that if the interposition of one insensible cuticle is sufficient to answer all the purpose of protecting the subjacent nerves from a painful sensibility, when in contact with external sub-

stances; and to modify such external impressions just sufficiently to give to the nerves the highest possible perceptive sensibility; that the interposition of two insensible integuments is more than is necessary for such purpose, and must operate to prevent the high perceptive sensibility possessed by the being having only one such interposing integument. Obvious as this must be, it becomes still more plain when the nature of this second substance is taken into consideration. It is a cellular membrane filled with an unctuous secretion, and consequently, without any of the elasticity of the scarf skin, and, of course, less capable of transmitting impressions to the nervous *papillæ* beneath it. That it acts, not only by its mass, but by its peculiar composition, to obstruct sensibility, is apparent from its slight attachment to the nervous expansions on the cutis, as well as the oily substance it contains. It is, in all respects similar to, and probably identical with, the *pigmentum nigrum* of the eye, which is more abundant in the Negro than in any other species; and which appears to be necessary to all the permanent races of men to protect the eye from painful sensibility to the light. Albinos, who have no such pigment in the eye, are painfully affected by noon-day light, and have perfect vision only during twilight.

We are aware of the facts and arguments produced and used by Dr. Prichard on this subject; but they have no weight against us. The fact that it required microscopic scrutiny to discover the rete Malpighii in the Shemitic species; that it could not be discovered without a microscope, while, in the dark races, it has long been known, and is easily discover-

able, and separable by maceration, without a microscope; that it increases in thickness in the descending series of species, until, in some Negroes, it is thicker than the cuticle; are facts sufficient for our purpose, admitting the researches of Henle and Simon. It has been long suspected, though it could not be proved, that a rudimentary membrane of the kind was present in the Shemitic species. Henle and Simon have established it in a rudimentary form, and have settled the controversy. The Albino, if he has this integument, has it still more rudimentary, still more imperceptible than the perfect Shemite; but he is, from excessive sensibility, incapable of performing ordinary duties as conveniently and comfortably as the species from which he was derived. The European is an example of what portion of this integument a race designed for the highest destiny should possess, to adapt them perfectly to the state of surrounding circumstances. That less would not answer is evident from the Albino, who suffers for the want of a proper proportion; that more would be prejudicial is evident from the obtuse and stationary mental condition of all the dark races.

We conclude, therefore, that the structure of the skin is a highly important subject for the consideration of the naturalist, for the determination of specific differences, as well as for the physiologist in relation to functions. It must necessarily modify the functional power of the nervous system, and therefore affect the quality of impressions upon the brain in a very high degree. The differences, in this respect, in the species of men, independently of capa-

city, or form of the skull, is amply sufficient to produce all the differences observable in all the species. It will account for the *strenuous* temperament of the Shemites; the *passive* temperament of the Japhethites: the *callous* temperament of the Ishmaelites; and the most hopeless and lowest of all, the *sluggish* temperament of the Canaanites;—whose only hope for an ameliorated condition, appears to lie in the bondage incident to "a servant of servants." If colonization should not diffuse among them some improvement of their condition, we think all hopes of any amelioration of the hard state of things prevailing in Africa may be abandoned. Of all the active benevolences of the Shemitic species, for the benefit of others (and it has been the high privilege of this species only, to be engaged in these projects), the Colonization Society of the United States stands foremost in the manner by which it has been conducted, and the grand missionary object it has in view: to promote the civil and religious happiness of the Africans by the only means which promises any hope of success. England, notwithstanding her abolition sacrifices in the West Indies, has done nothing, by that act, for the amelioration of Africa, if she has for the Negroes whom she liberated, to become the despised and the dreaded objects of their former masters, and the worse slaves of their own passions and propensities. Our own abolitionists would accomplish nothing for Africa, and worse than nothing for a vast majority of the Negroes, if they should succeed, in what they, no doubt, believe to be a conscientious duty. But our Colonization Society is, to the full extent of its means, endeavor-

ing to reimburse to Africa all the robberies from her soil, by returning her children to her in the highest state of civil and religious cultivation they can attain by their intercourse with us.

Closely connected with the nature and functions of the cutis are the hair and perspirable matter; which we would expect to be naturally modified, in the different species of men, according to the differences observed in their integuments. So, accordingly, we find them. Dr. Prichard has devoted the eleventh chapter of his Natural History of Man, to prove that the cuticular excrescence of the Negro is not wool but veritable hair; which he has undoubtedly proved satisfactorily, to the discomfiture of the respectable Negro preacher, who quieted the fears of his sable congregation, by the comfortable assurance that they were the sheep and lambs of the world, because they had the wool. Excepting this preacher, we have never heard of any philosopher who seriously affirmed Negro hair to be wool. It is often called *woolly*, to designate its knotted, involved appearance; and frequently, by a kind of license, it may be called *wool;* but we know of no respectable author who uses either word with a design to be understood to call Negro hair actually wool. He has therefore set up a man of straw for the pleasure of demolishing him.

But the paragraph at the conclusion of the chapter, p. 104, deserves a little notice. "It may be worth while to remark," he says, "before we take leave of this subject, that if this cuticular excrescence of the Negro were really not hair, but a fine wool; if it were analogous to the finest wool, still this

would by no means prove the Negro to be of a peculiar and separate stock, *since we know that some tribes of animals bear wool, while others of the same species are covered with hair.* It is true, that in some instances, this peculiarity depends immediately on climate, and is subject to vary when the climate is changed; but, in others, it is deeply fixed in the breed, and almost amounts to a permanent variety."

This is the only paragraph in the chapter which relates to the subject of specific difference properly; and we quote it, not for its force, but to show how loosely, and how much as a matter of course, an author of eminence may rely on false premises to sustain a favorite theory. The confusion of resemblance and analogy is so frequent that if we should notice all the instances, it would swell our volume beyond reasonable bounds.

The root of the hair is seated partly in the under surface of the cutis, and partly in the flesh, subjacent to the cutis. It is a bulb, lodged in a follicle, or little sack, which contains the coloring matter. It perforates the cutis, rete mucosum, and cuticle, without, so far as is yet known, undergoing any change by these intervening integuments. As the hair passes through the rete mucosum, it has been imagined that it obtains its color from this substance. This appears not to be the fact; for the follicle containing the bulb of roots is not only below this unctuous integument, but actually on the under side of the cutis, and there are no roots in the rete mucosum. Besides, if the color depended on this integument, no white person could have black hair, as no white person has this black pigment. The color must there-

fore be derived from coloring matter about the roots. But it is not the *color* of the hair in the different species which constitutes the important item for consideration, although it is of some importance to determine *from whence* it has its growth, and derives its properties; because, if these are below the corion, they show conclusively, what should never have been doubted, that the peculiar secretions which give the rete Malpighii and the hair the specific peculiarities, are deeply seated, and pervade the systems of the different races. But it is not the color to which we ask attention. It is the strong, coarse, horse-like hair of all the dark races; terminating in the strong, wiry, knotted, and involved hair of the Africans; which differ from each other, and from European hair remarkably, constantly, and permanently. Nor shall we stop to inquire whether a few Europeans may, or may not be found, having hair similar to the Hindoos, Chinese, or even Negroes; for such exceptions, if they exist to the whole extent claimed, cannot affect the general principle, cannot destroy the principle, because the races "run into each other by insensible degrees."

Dr. Prichard examined the "hairs of a Negro, of a mulatto, of Europeans, and of some Abyssinians, with the aid of glasses magnifying about 400 times." He states the result (p. 103), thus: "The hair of the Negro, which was extremely *unlike* that of wool, and of *all other varieties* mentioned, had the appearance of a cylinder with a smooth surface; they all appeared more or less filled with a dark coloring matter, which, however, did not entirely destroy their transparency. The coloring matter was apparently much more

abundant in the hair of the Negro than in the others. The Abyssinian hair was also very dark, but so far diaphanous that a riband-like band appeared running down through the middle of a cylindriform tube; and the mulatto hair resembled the Abyssinian in this respect. The filament of European hair seemed *almost entirely transparent;* it had the appearance of an empty tube, coated internally with something of a dingy or dusky color, which only prevented it from being quite pellucid. European hair of a light color had the same appearance, but was still less darkened."

We make this quotation to show that the hair of the different races is actually of different texture, a fact which we would not have imagined, but for the above microscopic examination. It is stated that "the hair of the Negro, which was extremely unlike that of wool," was also extremely unlike that "of all the other varieties mentioned." The coloring matter pervaded the whole texture or substance of the Negro's hair, the transparency of which was not entirely destroyed, but it does not appear to have been in any respect diaphanous or transparent, sufficiently to indicate that any riband or darker colored substance occupied the centre than the circumference of the hair. The Abyssinian hair, which was probably an Arabian, "was also very dark, *but so far diaphanous that the riband-like band* appeared running down through the middle of a cylindriform tube;" and "the filament of European hair seemed almost transparent," while the same hair, "of a light color, had the same appearance, but was still less darkened." When it is remembered that human

hair, according to Weber, "consists of a homogeneous substance in which no distinction of cortex or medulla can be perceived;" "that the entire hair thus may be said to consist of a bundle of longitudinal fibres," all of which have their origin in the same bundle of roots; we say, when all these things are considered, it appears that there is actually a difference in the substance of the hair of the different species, corresponding with the specific constitutions of the individuals. This does not appear to depend upon the color, from the examination made by Dr. Prichard; for the black hair of a European, and especially of an Abyssinian, is as black as that of an African; consequently, the opacity, or transparency, of the different hairs, must have been owing to the substance composing all the longitudinal fibres of which the hair is composed, and not merely to the coloring matter.

There are other important circumstances which strongly confirm this view of the hair, in the peculiarities relating to the species. The hair of the Negro is strong, *dry*, black, *knotted*, and *wiry;* that of the Chinese and Tartar is *long*, equally as black, *lank*, *shining*, *oily*, *and flexible*, but coarse. While that of the European, even when equally as black as any of them, is not as *lank*, *coarse*, *shining*, or *flexible*, as that of the Chinese or Tartar, nor as *dry*, *knotted*, or *involved* as the African. We speak of the races in mass, for single exceptions there may be, which prove nothing against a general principle. Now, we ask, what is it that bestows these very opposite properties to the hair of these races, when they are all equally black? Why is it that the hair of

the leucæthiop, or Negro Albino, whether red, or flaxen, is as knotty, as wiry, and as woolly, as that of his sable parents?

We have said that "single exceptions there may be;" but this remark requires qualification. Europeans may be found having hair approaching to the character of the Ishmaelitic or Japhethic races; and it may be, although we have not heard of it, that some of these last may approach the Canaanites in this respect; for such overlapping of species appears to prevail throughout nature. Remote species seldom approach each other in those things which constitute their specific differences, though they must in those which constitute their generic agreements, if of the same order or genus. So, precisely, do we find the human family in regard to the hair. We have seen Europeans with hair very similar to the natives of our forests; but who has ever seen one with the short, wiry, crisp, knotted, involved hair of an African? We have seen European heads adorned with closer curls than we thought beautiful, particularly of red haired men, whose skin approached the dryness of an Albino; and such hair may, by some persons, be regarded as different only in degree from the African. But it is wholly different in every respect. The curls, although somewhat harsh, are really curls, and not tufts, banded together at the extremities.

We have seen it stated in a recent highly respectable periodical, though we cannot now find it, and know not on what authority it rests, that the Negro actually expires less carbonic acid than the white man; consequently, that more carbon is absorbed in

the system;—that, from this cause, Africans seldom have fetid breath, but transpire the fetid matter, somewhat modified, chiefly by the skin. We say we know not on what authority this rests, though our impression is, it is reliable. Be this as it may, there are several facts to warrant the conclusion that there must be a difference in the respective species, in the functions of the lungs, in regard to the oxydation of the blood,—small, it may be, in amount, but vastly important in its influence upon the animal economy, and vital energy. This is manifest not only in the rete mucosum, and the secretory functions which give rise to it, but in the lubricity of the skin, and the peculiar odor it emits. It is well known that all the dark races have a more oily, velvety skin than the white race. Johnson, in his work on "tropical climates," mentions this oily secretion of the natives of India, as one of the peculiar characteristics which protect them from the effects of the climate, not enjoyed by Europeans.

This constitutional tendency to appropriate to the use of the system a larger portion of carbon, the chief element of the fixed oils, is, probably a chief cause of the comparative torpor and insensibility of all the dark races, and their consequent exemption from nervous diseases.

One of the rules stated by Dr. Prichard, in his "Researches into the Physical History of Mankind" is, the identity of the animal economy as evidenced by the duration of life, and being subject to the same diseases, and liable to the same contagions, as an evidence of identity of species.

It is certainly a new rule by which to test specific

differences by their comparative longevity, and liability to diseases. It may be a good one, nevertheless, although of great difficulty to be applied, even to human subjects. The pathology of animals, particularly wild, is too little known to be made a test of species. Nor has it been made a test by naturalists. The pathology of the human species is better understood than that of animals, and therefore, if it can be made a proper test, it should not be rejected. Let us examine it.

We take no notice of longevity, or the duration of life, as it proves nothing by itself, and is a mere adjunct to give color to the diseases. The goose and the eagle, the dog and the hog, and many other animals universally acknowledged to be of different species, have about the same duration of life.

It may be true that all the human family is subject to the same diseases, and liable to the same contagions and infections; but not all in an equal degree. There is a difference in the respective species, in their tendency to attacks of particular diseases, and their liability to infections and contagions, which arises from constitution, independent of acclimatization. This arises from the greater constitutional torpidity of the dark, than of the white species. The torpor of the blacks is known to every medical practitioner who has had any extensive practice among them; and is regarded by them as one of the difficulties to be overcome, in their remedial measures, as a similar torpidity among inferior animals is regarded by the veterinary practitioner. Compared with the constitutional elasticity and vigor of the whites, there is, probably, no more difference be-

tween them and the blacks, than between these and inferior animals. These are important circumstances, but we do not now rest upon them to prove a difference of species.

Most of the diseases, infections, and contagions, to which the human system is liable, belong also to animals. Indeed we know not how far the theory of a pathological identity might identify man with brutes, if it were relied upon to identify the human species. There is at least some danger it would prove more than might be desired, as it might bring the chimpanzee, and all his congeners, into our family, to whose relationship we have all exhibited so much repugnance.

It is natural to suppose that a disease to which the human system is especially liable, the small pox, which Blumenbach considered peculiar to man ; and which, after having been once subject to it, effects a constitutional change which prevents re-infection, would be more peculiarly a human disease than others not possessing this character. It would also be natural to suppose, that, if one animal were inoculated with a disease, the matter of which was taken from another animal, which would produce the same change of constitution to prevent the liability to the small pox, that these two animals were more nearly allied, constitutionally, than any two who were only liable to the same general diseases, which they might be without implying an "identity of animal economy. Although all this takes place by vaccination, we believe no philosopher has yet thought of classing our "milky mothers" and man

as one species, although all would prefer them to apes and monkeys.

This single example may well make us pause, until the subject shall have received a thorough investigation, before we admit diseases to be a test of species. It may be that the difference of diseases of all the terrestrial mammalia is in fact so small as only to be a modification of types; and these modifications may approach to, or recede from each other, in proportion to the proximity or distance of the species: consequently, it may be, that the pathology of the Chimpanzee and Negro of Guinea, are as similar, as that of the blacks and whites of the United States.

It is well known that if a cow, horse, or other domestic animal has a malignant disease, the murrain, or black tongue, for example, and any of the virus from any of them should get into the human system, it will occasion the same disease. Hydrophobia is communicated to animals and men with equal certainty, and is attended with the same horrid symptoms and fatal effects.

In regard to epidemic disorders, it has been remarked, from the earliest ages, that they often equally affect the human family and animals. Homer speaks of an epidemic during the siege of Troy, which destroyed men and animals indiscriminately. Plutarch tells us, in his life of Romulus, that a pestilence prevailed which destroyed many cattle and Romans. And Livy informs us that difficulty was experienced in the Roman army, because the pestilence which had prevailed among cattle had broken out among the men. Tacitus mentions a great mortality of men and animals, which carried off all ages

indiscriminately, "without any sensible intemperance of the weather." Among the plagues which were inflicted upon Egypt on account of the children of Israel, was an epidemic which "became a bile, breaking forth into blains, upon man and upon beast." Epizooties frequently follow or accompany epidemics; and the reverse, epidemics accompany or follow epizooties. Many other examples might be collected from history, particularly several which very extensively prevailed over Europe during the dark ages; and more recently in the 18th century, when domestic and wild animals, as well as man, were affected by a malignant disease. In the year 1807, an epizooty prevailed in North-eastern Asia, which carried off numbers of animals and men.

The causes which produce malignant diseases among animals are, so far as can be ascertained, in all respects the same as those which produce malignant epidemics among men, Therefore, although all epizooties are not accompanied nor followed by epidemics, nor the reverse, yet they so frequently do, that the exemptions may be regarded as escapes depending on causes not affecting the general rule.

If we refer to veterinary medical works, we will immediately be struck with the long list of identical disorders incident to animals and man. Malignant epidemics and fevers, inflammatory and typhoid fevers, catarrhs of all kinds, sore throat, bronchitis and phthisis, acute and epidemic pneumonia, pleurisy, diseases of the pancreas, liver, and kidneys, jaundice, inflammation of the bowels, colic, constipation, diarrhœa, dysentery, stone, dropsy, hernia, rheumatism,

chronic and inflammatory, leprosy, &c., &c., are diseases to which man and animals are both liable.

But nothing will, in a more remarkable manner, illustrate, if not identify "the animal economy" of domestic mammalia and man, if diseases should be made the tests, than the medicines prescribed to animals and men, as curative or alterative means. The veterinary pharmacopœia is identical with the medical, as will be perceived from the following list: alum, alcohol, antimonial preparations, ammonia, anti-spasmodics, astringents, blisters, calamine, calombo, calomel, camphor, caraway, and other aromatic and stimulating seeds and roots, castor oil, catechu, caustics, chalk, and the various preparations of lime, chamomile, clysters, cordials, diaphoretics, digitalis, diuretics, epsom and glauber salts, fomentations, gentian, ginger, Goulard's extract, iodine, ipecacuanha, the several preparations of lead, linseed, mint, myrrh, nitrous ether, nux vomica, opium, nitrate and sulphate of potash, ergot, lunar caustic, sulphur, tonics, turpentine, tar, vinegar, vitriol, &c.— which are all necessary to the veterinary, and would form no mean list for the medical practitioner.

Thus we see, that man and animals are subject to the same diseases, which are cured by exhibiting the same remedies. It is true that there are a few (and they are, considering the vast differences of the beings, very few), diseases peculiar to each, which do not affect the other, arising chiefly from the difference of structure, and mode of living; but even these are much fewer than are generally imagined, and relate more to the cautions to be observed in administering the remedies, than in the natures of the

diseases. We before remarked that animals, under disease, are more torpid than human beings; besides which, ruminant animals must be treated with special reference to their stomachs; both of which circumstances make alterations in practice.

Such is the similarity of disorders and treatment of man and animals, which differ, zoologically, not only in species and genera, but in orders. Is it surprising, therefore, that men, who only differ in species, should be liable to the same diseases, contagions, and infections? If diseases prove any thing in relation to the species of men, do they not prove, from the foregoing facts, that there are distinct species of men? How else is it to be accounted for that the dark races, and more especially the Africans, are comparatively exempt from nervous disorders, the yellow fever, more subject to the *yaws*, have less nervous sensibility, and exhibit more torpor under disease, than Europeans? Are not these differences more than what might be expected between beings allied so closely, of the same genus, considering that creatures, which differ from each other by orders, are so nearly allied by diseases?

It is now proper to examine the osteology of the different species of men, particularly in reference to the head. Although we do not regard the shape and size of the skull to be *all important*, as some have imagined, we nevertheless do regard these circumstances as important items of knowledge in the natural history of man. The moral and intellectual power of an individual, or of a nation, cannot be told by the size and shape of the skull alone; but experience has proved, that, other things being the

same, they do indicate these qualities. The natural instinct of man corroborates science in this respect; for all men involuntarily pay homage to a broad, high, full forehead, and elevated vertex. They are jewels in the crown of nature, to which all men pay a willing and admiring respect, unmixed with the fear which accompanies the enforced homage exacted by him who wears a crown of gold and precious stones.

That the anterior brain, or cerebrum, is the seat of intellectual power, is strongly confirmed by the fact, that all of the different species of men exhibit a greater or less development of this portion of the skull, in proportion to the mental powers they have respectively exhibited. The Shemitic species stand preeminently at the head of the human family in mental power, and they exhibit a larger development of forehead.

In a former chapter on "What constitutes a distinct species," we have given the osteological comparative anatomy of the orang, chimpanzee, and man, from Owen; and have attempted a like statement of the Shemitic and Canaanitic species, to which we refer the reader.

Phrenologists have located the reflecting faculties, or chief attributes of the intellect, in the superior part of the forehead, in which they have followed universal experience. The inferior portion, or base of the skull, in all the races of men, approaches nearer to a uniform standard, than the superior; for although they do differ in this respect, yet by far the greatest variation is found in the superior regions. In a well developed Shemitic head the reflective

faculties occupy the whole superior region of the forehead. The ancient Greeks were fully acquainted with this important fact. They gave, in the statues of their heroes and gods, to this part as great an amplitude as a just proportion to the base of the skull would allow, and sometimes greater. "This skull," says Lawrence, Lect., p. 291, "presents the finest intellectual organization; proportions indicating the greatest predominance of the rational faculties over the instruments of sense, and of the common animal wants. The upper and front parts of the skull are more developed than in any other variety; and their ample swell completely hides the face, when we survey the head according to the *norma verticulis.* The facial line must, therefore, be nearly vertical; and the facial angle nearly a right angle. The face is comparatively small, and its outlines rounded, without any thing harsh, or unpleasantly prominent. The cheek bones are small, and do not stand out, but descend, in nearly a straight line, from the external angular processes of the frontal bone. The alveolar margin of the jaws is rounded; and the front teeth are perpendicular in both. The chin is full and prominent."

If we should regard the skull exclusively as the index of intellectual power, the above form of the cranium includes, according to Lawrence, p. 293, all of the following people, ancient and modern, viz., "The Syrians and Assyrians, Chaldeans, Medes, Persians, Jews, Egyptians, Georgians, Circassians, Mingrelians, Armenians, Turks, Arabs, Affghans, Hindoos of high caste, Gipsies, Tartars, Moors, Berbers in Africa, Guanches in the Canary Islands, Greeks,

Romans, and all the Europeans except the Laplanders." We are inclined to doubt the truth of the test, or the accuracy of observation of those who made the classification, which groups together such an odd assemblage of opposite characters, physical, intellectual, and moral. If craniology can do no better than to place Tartars and Turks, Affghans and Indians of high caste, by the side of Englishmen and Frenchmen, Italians and Germans, we should regard it as of very little value, however entertaining the study of it may be to the learned. But we much doubt whether that very close attention has been given to different crania, necessary to ascertain with precision their different capacities, and the peculiar formation and developments upon which the nice shades of character and intellectual power depend. In very remote ages, all the species of men started from Babel, in the great race of intellect and power, in an equal condition in the knowledge of elementary principles. For a period embracing about 1000 years after the dispersion, until the Pelasgians of Greece became civilized, all the races appear to have remained nearly on an equality in arts and sciences. Egypt, Canaan, Syria, Babylonia, and India, embracing all species of men, differed as little in degrees of civilization as many nations of Europe at present. But since that period, the change of conditions has been rapid and immense. The Japhethites and Ishmaelites have improved very little, or remained stationary. The Canaanites have lost all they could lose, consistently with the nature of man. But the Shemites have progressed with increased and still increasing rapidity of improvement, each

new acquisition furnishing the means for another advance. It is susceptible of proof (which will be given hereafter) that the crania of the different species were, when they were all equally civilized, of the same forms and capacities they are now. What, then, has produced the vast differences now observable in the species of men classed together by their crania?

There must, therefore, be some error in the observations which place the skulls of the people of Western Asia, and Northern Africa, in a class with those of Europe. It may be that the very globular Turkish skulls, so highly praised by Mr. Lawrence, were so accurately globe-like at the expense of what phrenologists call *causality*, and by a large development of combativeness and destructiveness. Or, it may be, that the crania of the Turks, Indians of high caste, &c., have not been sufficiently studied in reference to the mass of the people; but that skulls may have been examined, accidentally, it may be, which were truly Caucasian, modified by Ishmaelitic blood. We know that most of these people who are able to bear the expense, always procure Caucasian wives; but the great body of the people must be contented with wives of their own species. Without attending to this fact, the craniologist may be led astray. Indeed it has been far too current with writers on man, to make general, sometimes universal, inferences from a few examples, or a single example. Their works abound with so many instances of this kind, that we are surprised so much reliance has been placed upon very general theories, built upon such slender foundations. A single

skull of a Lapland female is sufficient "to prove, unequivocally, that this race belongs to the Mongolian variety," Lawrence, Lect., p. 309. And yet Mr. Lawrence, on some occasions, withholds his assent to inferences on such bases, with a proper caution; and speaks our sentiments so fully that we will transcribe them. To Sœmmering's observation, that he could find no well-marked differences between the German, Swiss, French, Swedish, and Russian skulls in his collection, Mr. Lawrence, pp. 304, 5, remarks: "That no striking difference has been discovered on comparing together *one or two casual specimens of each of the nations above mentioned, does not authorize us to conclude that no differences exist.* On the contrary, if the brain be the seat of our intellectual and moral functions, which nobody at present seems to doubt; and if the several propensities, sentiments, and intellectual powers, are the functions of certain parts of this organ, which is at least a probable doctrine; we shall be much surprised to find that no distinctions are observable in the shape of the cranium, between English, French, Germans, Italians, &c. The only mode of ascertaining the point satisfactorily, would be to collect a considerable number of heads of each nation, or of accurate casts or portraits; and to select for this purpose individuals of *genuine descent, whose organizations have not been modified by foreign intermixture.* My friend, Mr. George Lewis, whose quickness in distinguishing forms, and readiness and accuracy in portraying them to the very life, are well known, observed in a tour through France and Germany, that the lower and anterior part of the cranium is larger in the

French, the upper and anterior in the Germans; and that the upper and posterior region is larger in the latter than the former. He was also struck with the very fine forms of the skull in the Italians, which coincides completely with what I have seen of them in this country. Our decision, then, on this very interesting subject *must be postponed at present, and await the result of more numerous and accurate comparisons.*" These observations apply with great force to grouping into one family, half of Asia, North Africa, and all of Europe, ancient and modern.

In our estimation, the functions of the vital system are, by far, more important indices of specific human character, than osteological formation. For this reason we have devoted our chief attention to this branch of the subject. We are aware we have not done it justice; but we have devoted as much space to it as we could, consistently with our general design; and, no doubt, the subject will receive, by some more able physiologist, the attention its importance demands. The osteological comparative anatomy of the different species of men, must not, however, be omitted. It is highly important, because it indicates functions. The slightest modification of any bone of an individual, even of the same species, must be attended by a corresponding modification of individual character. The modification of any one bone must modify the whole system, though it may be more apparent in the particular bone than in any other part. The chin, for instance, is, apparently, as unimportant a part of the human system as we can imagine; and yet a rudimentary chin, in proportion as it recedes and dimin-

ishes, is almost universally attended by a corresponding diminution of the cranium, and power of the intellect.

Smith says—"If my observation does not deceive me, most people have the nose rather concave than otherwise. Yet I think, in a great majority of instances, persons of very distinguished talents have that feature convex, and often remarkably so.

"The chin, however, affords the best exemplification of a combination, far more frequent, than any phrenology can boast of; where, nevertheless, to speak of cause and effect, would argue insanity. I do not remember to have seen the visage, bust, or picture, of a very distinguished man, in whom that part of the face was small, and very receding. And if the rule be applied to the races of men, and classes of animals, it holds, perhaps, without exception. Thus the chin is most prominent in the Caucasian, less so in the North American Indian, and least in the African, whose flat nose is moreover well known. As you descend, to monkeys, dogs, &c., with the declining intellect, the chin diminishes, and recedes until, low in the creation, it is no longer found.

"Yet to avoid misapprehension, I must add that in different members of the human family, no reliance can be placed upon the converse of the ratio which has been stated. I have repeatedly seen all the features cast in the finest mould, and there was, notwithstanding, no mind to accompany them." —Select Discourses, pp. 115, 116. Note.

But, although we regard the osteology of the different species of importance, it has been furnished so minutely by almost every author who has written

upon the natural history of man, that we think it unnecessary to detail it. We should only repeat what they have written, and what all either know, or may know, if they desire it. The general reader regards technical terms with a kind of abhorence. Rather than encounter a page of them he would cheerfully take a dose of the ancient epileptic specific, prepared from a human skull, technically called *cranium humanum.*

We have, in various parts of our work given the physical characters of the different species, which we do not think necessary to anticipate, or repeat. The two extremes are the Shemites and the Canaanites; and the intermediate species the Ishmaelites and Japhethites.

Of these intermediate species the Japhethites approach the Canaanites, and the Ishmaelites approach the Shemites, in physical characters. The Japhethite approaches the Canaanite, in a low slanting forehead; in a broad and depressed nose, and size and shape of the nasal bones; in the flatness and broadness of the suborbital region of the face, and prominence of the cheek bones; in the obtuse arch of the alveolar margins of the jaws; in the development of the lips, and in a diminished chin. They differ from the Canaanites, by a broader base, more angular form, and a greater elevation of forehead; by more rudimentary superciliary ridges; a more elevated and less confused nose with the cheeks; by angular, linear eyes; by a less development of lips; by a less projection of the jaws, and consequent greater perpendicularity of the incisors; and by a greater development of chin.

The Ishmaelites differ from the Japhethites, and approach the physical character of the Shemites,—in the more globular form and greater elevation of the forehead; in the more rounded form, and less expansion of the malar bones; in a narrower and more elevated nose; in the perpendicular formation of the alveolar margin of the jaws; in the formation of the lips; and in the prominence of the chin. They differ from the Shemites, and approach the Japhethites, by a lower forehead; a greater expansion of the suborbital region of the face and of the cheek bones; and a less developed chin.

In intermediate species, especially those which approach each other closely,—and more especially a nomadic race, the stationary tribes of which have, from policy, intermingled with others,—we may naturally expect to find many individuals possessed of the characteristics of the next series. But, although the approaching species may not be very strongly distinguished by their physical characters, the distinction becomes immediately and strikingly apparent, when we apply the test of functions, and the evidence of history. Let us grant, for instance, that many of the Turks, Arabians, and Persians (all of whom belong to the Ishmaelitic species), approach the Shemites in physical characters. It is evident, as well from their histories, and their physical characters, as from their temperaments, indicated by their skins and functional powers, that they form a distinct species, with human powers altogether unequal to the task of competing with the Shemites in the onward progress of improvement and power. We say nothing now of the causes which have con-

tributed to elevate the Turks, Arabians, and Persians, to be the connecting links of their species with the Shemites, which properly belongs to their specific histories; but apart from this consideration, they undoubtedly make the nearest approach to the Shemites; and will, probably, in the fulness of time, advance rapidly beyond the Japhethites, who now excel them in the useful and ornamental arts of life. But it is when the types of each species, as some of the nomadic tribes of Central Asia, or the Indians of America, are made the subjects of comparison—and, more especially, when the more remote species, as the Japhethic or Canaanitic, and the Shemitic are compared, that the contrast is immediately and obviously manifest.

The conclusions to which we arrive from the foregoing premises are the following:—

First—That, between individuals of the same species, one compared with another, the capacity and form of the skull, and size of the face, together with the temperaments of the individuals, are important items for consideration in estimating intellectual and moral power.

Secondly—That, between individuals, or races, of different species, one species compared with another, the functions or temperaments of each species are of primary importance to estimate intellectual and moral power; subject, however, to modification and allowance, for the comparative form and capacity of the skull and face.

Thirdly—That the anatomical and physiological differences between the races of men, constitute them distinct species.

All the historic facts of the human species, and all the scientific principles of classification, support and confirm these conclusions. We cannot, therefore, withhold the expression of our surprise, that men of the highest intellect of our day, after detailing the facts with clearness, precision, and candor, have sought to escape from the conclusion, because the several species pass into one another by imperceptible gradations. That is, from the blackest, and most brutal Canaanite, to the fairest, most intellectual and moral European, every shade of complexion, and every grade of moral and intellectual quality, may be traced in a regularly progressive series. The fact is undeniable. There is such a gradation of color, and of moral and intellectual qualities; but the inference that, therefore, all men must be of one species is contrary to all the principles of classification in zoology. If admitted in the classification of man, the highest, and most important subject of natural history, it must also be admitted in relation to every subject; which would subvert the science. It cannot be supposed that these gentlemen were unacquainted with the difficulty of classifying the vegetable and animal kingdoms, from this very cause. Not, indeed, that each class, order, genus, and species, does not present types sufficiently distinct to afford subjects for correct classification in each division; but that, on each side of these types, to both extremes, individuals run into other divisions, which make it extremely difficult to classify them satisfactorily. The ingenious circular system of McLeay is founded on the fact, that each group in the natural kingdom is connected, at each extremity, with ano-

ther above and below it, forming a circle; that however conspicuous the typical examples may be in each species, yet that they recede from each other, until, at each extremity, they pass, as it were, into other species. Eels connect reptiles with fishes; bats and the *monotrema* connect birds with quadrupeds; and the beautiful little humming bird, which feeds on the nectar prepared for the scarcely less beautiful butterfly and the industrious bee, unites birds and insects. Nature makes no sudden bounds in her creative energies. She passes from one division to another by such easy and skilful processes, that the mind of the most ingenious man, in tracing her works, is lost in wonder at the apparent ease with which she threw off organic beings, endowed with all the varieties of forms, powers, habits, instincts, and faculties, approaching to, and receding from each other, to fill up the whole space of the inorganic world she had constructed.

The argument, therefore, that all men are of one species, because the different species run together by easy gradations, amounts to nothing; for "the anatomical and physiological structure and functions of the different races of men are sufficient to constitute distinct species."

CHAPTER X.

WHETHER ANY, AND WHAT INFERENCES, CAN BE DRAWN FROM ACCIDENTAL VARIETIES, SPRINGING UP IN THE HUMAN FAMILY, TO ENABLE US TO ACCOUNT FOR THE DIFFERENCES OBSERVED AMONG MEN.

Having, as we hope, disposed of the analogies so abundantly used to confirm the doctrine of the unity of the human species, we now propose to examine the theory that all of the varieties of the human family have sprung from the black race. The theory requires that Negroes should be the great original prototypes of mankind; because, although Albinos have been known to spring from them, none of the dark races has ever arisen from the white race. Thus all mankind are, in fact, Negroes, whose progenitors owe their colors, and physical differences of organization, to diseased or accidental generation. This is somewhat humiliating; but, if true, we must bear it with philosophic patience, notwithstanding. Whatever was the color of Adam, we are taught that his name signifies red; and we are told that the daughters of men who captivated his immediate descendants, "were fair to look upon." No matter. It is necessary that all men should be of one species, to sustain the Mosaic account of the creation, according to the opinions of theorists, and these little discrepancies are overlooked, or, if seen, are too trifling to be noticed. Adam and Eve, and Noah, and his

sons, must have been Negroes; and the red, yellow, and white varieties were produced by diseased, or accidental generation, which were confirmed by great care and art, and became hereditary. This may, in the estimation of some, be regarded as very sound philosophy; but, with becoming deference, we think it is not common sense.

Dr. Prichard, in his "Researches on the Physical History of Man," observing an almost universal agreement between the color of the skin, and of the hair of mankind, proposes the following divisions for the varieties of the human family; viz.: the Melanic, or black-haired; the Xanthous, or, yellow-haired; and the Albino, or, white-haired, varieties.

"The Melanic variety," he says, "forms by far the most numerous class of mankind. It is the complexion generally prevalent; except in some particular countries, chiefly in the northern regions of Europe and Asia, where races of the Xanthous variety have multiplied; and it may be looked upon as *the natural and original complexion of the human species.* The hair of the head, in the Melanic races, is of various texture and growth, from the long and lank hair of the native Americans, to the fine crisp hair of the African Negroes. The hue of the skin varies from a deep black, which is that of some African nations, to a much lighter, or more dilute shade. The dusky hue is combined in some nations, with a mixture of red; in others, with a tinge of yellow. The former are the copper colored nations of America and Africa; the latter the olive-colored races of Asia. In the deepness, or intensity of color, we find every shade or gradation, from the black of the Sene-

gal Negro, or the deep olive and almost jet black of the Malabars, and some other nations of India, to the light olive of the northern Hindoos. From that we still trace every variety of shade among the Persians and other Asiatics, to the complexion of the swarthy Spaniards, or of European brunettes in general."

This is all right enough, as theories of ingenious and learned men generally are, except that it wants facts for a foundation. We always supposed it to be a universal law of nature, from which there are no well ascertained exceptions, that deviations from the natural type of progenitors, by reason of some freak of nature, always had a strong tendency to return to the type from whence the departure commenced. According to this law, if the white species are indebted to the Negroes for their existence, we should sometimes, at least, if not often, find children of white parents born black; an example of which would be a most unfortunate occurrence in an aristocratic family. The contrary appears to prevail; for all births in which a departure occurs from the type of the parents, are from darker to lighter—from the Senegal negro to the leucœthiop. Albinos are more numerous among Negroes, and other dark races, than among white people, in proportion to numbers; from which, agreeably to the above law, it might reasonably be inferred that the original color of man was white. Buffon assumes white as the primitive color of nature, which, he says, may be varied by climate, food, and manners, to yellow, brown, or black; which latter may return occasionally to the primitive color, in an Albino. These theories only show, that when ingenious men have determined to invent a theory,

they can generally find means to give it plausibility; and that the only safe method of investigating any subject, is to start with known facts, and proceed with them as far as possible; after which speculation may be permitted, if it should not run altogether into the regions of fancy.

The cause of the production of Albinos is not certainly known; but it is generally attributed to imperfect generation. Be this as it may there is never any difficulty in assigning every Albino to the race from which he or she sprang. We have seen several Negro Albinos, each of whom had the Negro type fully developed; the only difference being in the color of the skin, hair, and eyes. All of their skins were more or less freckled, on a pearly, sickly, white ground. The hair was white, or red, but as short, knotted, and wiry as a Negro's; an evidence that these latter qualities do not depend upon the color of the rete mucosum, as some have imagined. Their eyes were red; but the retreating forehead, flat nose, high cheek bones, thick lips, projecting jaws, and receding chin, were as strongly marked as in their parents. Albinos from white parents are as distinct from those from black, as the parents are.

The theory that all the colors of men are only accidental varieties, produced from an original dark color, because all of them produce Albinos, is subject to as many difficulties as any other theory which has been adopted. All departures from the original type are from dark to white, and never from white to yellow, red, or black; nor from any intermediate color to a darker, as from red to black. Consequently the theory must adopt black as the original color of our

species. But as a departure from the natural course, of birth among Negroes, is always from black to white, whence came the intermediate colors, red and yellow? Not from the white species; for a departure by them, is not to a darker, but a whiter offspring. Nothing, therefore, is gained by the theory, because it does not account for the difficulty.

That mutes have escaped being made examples for the purpose of illustrating the theories of speculative philosophers is somewhat surprising. Suppose it had happened that Shem had a mute son, and Ham a mute daughter, which would be far more probable than that they had Albinos; and that this son and daughter married, wandered off by themselves, and begat a race of mutes which are now represented by the chimpanzee and his congeners:—would such a supposition be more absurd, or unphilosophical, than many that are gravely advanced by philosophers? It is true that mutes are deaf, and the chimpanzee hears; but it is, comparatively, a slight tax on the imagination, or the credulity of theorists, to suppose the offspring, in time, to have acquired this sense.

Opposed to this theory, to all theories founded upon accidental, unnatural, or monstrous births being the progenitors of any permanently distinct race of men or animals, stands the fact that they are all hybrids. Not in the rigid sense of the word, absolutely incapable of procreation; but in as sure a sense, though a little more remote. They speedily disappear, if not renovated by occasional intermixture with the original stock. A few generations and they are gone; as if nature was in haste to obliterate

an organization she did not design,—a trespass upon her domains she would not permit. The porcupine men of England, of whom speculative philosophers made a kind of capital, continued their kind no longer than was necessary to furnish food for speculation, when they departed, leaving only their descriptions behind. Men with six fingers and toes on each hand and foot have occasionally appeared; but nature will not own them, and they too are extinguished. We have seen a man, and a very industrious one too, on the eastern shore of Maryland, near Port Deposit, without shoulders; his arms springing immediately from his trunk, owing to some defect in his clavicle and scapulæ. Some of his children had the same malformation. Such a race of men could not become permanent.

It probably did not occur to those who inferred the origin of the varieties of the human family from such rare freaks of nature, that they afford stronger grounds for believing that every species of men are the direct agency of creative power in the manner and form they now bear. Because if departures from the natural standards of species are extinguished, by the operation of the law relating to generation, how could departures of such magnitude, as are observed among the different species, be sanctioned and perpetuated, if they all sprang from one color and organization? The inference is fair that they could not. We find the law to prevail universally in organic nature; among men, animals, and vegetables, Albino sheep, pigs, horses, cows, mice, rats, squirrels, opossums, martins, weasels, deer, foxes, rhinoceroses, blackbirds, crows, in short almost every warm blood-

ed animal, have been found; and every child knows that thousands of human beings have been destroyed on account of an Albino elephant which constituted the most precious treasure of royalty in Siam. Albinos possessing all the peculiarities of the human, appear to be widely distributed among other warm blooded animals, as well as man; but who has heard of their having propagated a species peculiar to themselves? The white rabbit and ferret are the only two which have been supposed to be of this description; which, however, is a conjecture. That the red eyes of the rabbit do not depend upon the Albino constitution, but on the nature of the species, is evident, because black rabbits have the same colored eyes,—at least several that we have seen. We ask, then, why is it, if accidental births give rise to permanent varieties, that we do not find these varieties among crows, blackbirds, and elephants? The answer is, that if they are not strictly hybrids, their defective constitutions are incapable of continuing the kind; or if their constitutions are vigorous, they speedily return to, and are lost in, their original types. Such appears to be the fact in regard to unnatural births in every species of animal, not excepting man. Does it not furnish a stronger reason for believing, that if man was originally created black, and of a peculiar organization, that a departure from that color and organization would disappear, rather than that they should become permanently constitutional and be the cause of the production of a new species?

The advocates for the theory do not pretend that any new variety can *now* be produced from this

cause; because, say they, the present state of society is unfavorable for it. It must have happened in very early ages, before population was so numerous as to swallow up and efface accidental varieties. Be it so; they do not escape from the absurdity of the theory by the supposition. They should remember that the proportion of such births, to the whole number, is not more than one to several millions; which, in a small population, approaches an impossibility. The chances of its happening in the early ages were therefore millions upon millions against it. When one was born there were as many chances against another; and when this other was born the chances were at least equal they would be of the same sex. If two, of opposite sexes, were born, the chances were thousands to one against their marrying, or being known to each other, in so sparse a population. Suppose all these contingencies to happen favorably for the theorist, by what process did the white race get rid of the red eyes, white hair, and pearly complexion of their ancestors?

One instance of monstrous birth is mentioned by Moses. Esau was "red, all over like a hairy garment;" but no race of hairy men was produced by him, unless the anthropomorphous apes should be regarded as his descendants. But Esau's period may not be sufficiently early to answer the demand of the theory. We must go back to the three sons of Noah, Shem, Ham, and Japheth; and we must suppose one to have had a white son, another a white daughter; one a red son and another a red daughter; one a yellow son and another a daughter to match, all of whom intermarried with

the proper mates, and had sons and daughters like themselves. We of course banish out of view all the chances against these births, marriages, &c.; because the theory requires them to have happened favorably, and of course they must have happened.

Is there no part of the earth which, at this time, presents every circumstance as favorable to the production of new races as the early patriarchal period? Has not New Holland a population sparse enough? The native inhabitants are all of the Melanic variety, of the perfect type. They have been undisturbed, too, by foreign intermixture, until lately. How long they have occupied the country we know not; but certainly long enough to afford the theory a fair test. The climate, too, is certainly unexceptionable, or rather highly favorable for the experiment. Under all these favorable circumstances the inhabitants continue to be Negroes. Not a trace can be found to warrant the slightest suspicion that this Melanic race is changing "the hue of the skin" "from the black of the Senegal Negro" "to every variety of shade among the Persians, and other Asiatics, to the complexion of the swarthy Spaniards, or of European brunettes in general."

If New Holland is objectionable take America, extending almost from the north to the south poles. Notwithstanding some travellers' tales, of a white tribe in the remote interior, which has been conjectured to be a colony of Welsh, we believe the search for an example will be equally in vain. Two distinct races probably settled our continent,—the Japhethites, represented by the Esquimaux, the Taltecs, Aztecs, &c., of Mexico, and the ancient Peruvians; and the

Ishmaelites who constitute the great bulk of the roving savages of our country. No trace has been discovered of a transmutation of species.

Section 5, of Dr. Prichard's "Natural History of Man," is devoted to a "History of several mixed human races." He furnishes a table, taken from M. Rugendas, of white inhabitants, mixed races, Negroes, and Indians, of nearly the whole of the two Americas. He then refers to, and gives figures of, the Griquas, Cafusos, and Papuas. These are all mixed races, similar to the mulattoes of North America, and depending, for their continuance, on precisely the same circumstances. The question, however, is not whether mixed offspring may or may not be propagated by the intermarriage of opposite species. This question has been long settled in the affirmative. The advocates for the unity of the human species put the question on a perverted issue, by placing it on this ground. The question is whether a mixed race can be continued, and made permanent, when confined to marriages among themselves. A mixed race may be easily kept up—Griquas, Cafusos, Papuas, or mulattoes—if the same causes which first produced them should be continued; but would they perpetuate themselves without such assistance? We have devoted much attention to this subject, have examined a number of mulatto families, and are satisfied that the children seldom exhibit the medium color of the parents. They are either whiter or darker, evidently approaching one or the other of the original species from which the mulattoes were derived. A respectable family of blacks are our near neighbors. The father is a half-

blood; the mother has a portion of European blood, the proportion of which we do not know. They have ten children, some of whom are much lighter colored than the father; as light as would be expected if their mother were a European. Others are darker than the mother, approaching black. If these children could be confined, in their marriages, to those of similar blood, we have no doubt they would soon separate into the respective species, or become extinct. It is probable, that the rule laid down by Professor Wagner, transcribed by Dr. Prichard, pp. 16, 17, applies to man, animals, and plants—"That plants produced from different varieties of the same species are altogether fertile, and that no impediment exists to their propagation; *while hybrids either revert to the original character, generally of the maternal parent, or become gradually less capable of reproduction, and, within a few generations, entirely extinct.*"

Dr. Prichard says, "a similar law prevails in the animal creation;" and our observations corroborate it in regard to man. We believe that those children, of mixed breeds, "which hold exactly an intermediate place between the parents," are less prolific than those which approach the type of either parent. Consequently they would soon become extinct, while the others would revert to the type of one or other of the original parents. This presents a new and interesting field of inquiry deserving attention.

How long would be required for the species to separate, if mulattoes were confined to marriages among themselves, can only be conjectured. An offspring of a European and Negro, if constantly in-

termarried with a European, generally requires five generations to efface the stain of impurity. It might be imagined, that by confining mulattoes to mulattoes, more generations would be required. This may be the fact, but we think otherwise. It is generally the case that the offspring of Europeans and Africans partake nearly of the middle tint and physical characters of the parents; and the same equal partition of properties generally accompanies each generation, when a mixed intermarries with a pure breed. As far as our observations extend this does not hold true with intermarriages of mulattoes; for it is seldom the offspring have the color and physical properties of the parents. It is far more common for them to be considerably lighter or darker. In large families of mulatto half blood parents, it is quite common to find several of the children as light colored as if one parent were white; and another portion of the children as black as if one parent were a pure negro; while those which represent the parents, exactly, will generally be the smaller number. The offspring of white and black parents, do not always hold exactly an intermediate place between the parents; for a preponderance, slight it may be, though sometimes very apparent, will be inclined to one or other of the parents. We have observed that when this preponderance of European constitution is possessed by a healthy, vigorous mother of a mulatto family, a majority of the children will be as white as if she were married to a European. On the contrary, when the mother preponderates to the negro constitution, and the father to the European, it is reversed. It appears, therefore, that the off-

spring follow the direction of the parent having the most vigorous constitution, most generally the mother; and, consequently, inclines to the black or white species, according to the bias of the parent whom it represents; the effects of which are greater when the mother gives the direction. This is a very curious and interesting subject. Mr. Walker's theory presents itself to the mind for its explanation; but our examinations have not yet been sufficiently extensive to warrant any more than the general conclusion, as we have above stated. The subject, will again be touched upon in a subsequent chapter.

The doctrine that the varieties of the human family have arisen from native or congenital varieties, rests entirely upon a supposed analogy, in this respect, between domestic animals and man. This is the most recent theory of philosophic ingenuity,—apparently the last resort of the advocates of the unity of the human species; from which, if they should be driven, the whole difficulty will be solved, and this long mooted question will be at rest. Drs. Prichard and Lawrence have overthrown the doctrine of the influence of climate, and other adventitious causes, to produce the different varieties of men. They have, therefore, left nothing for the unity to stand upon, but this ingenious theory of native or congenital varieties. If they had been French, instead of English philosophers, they would not, probably, have adopted this theory; but the science of breeding domestic animals had arrived at such perfection in that wonderful island, by which so many fortunes had been made, and which, therefore, attracted so much attention, that the theory was made to

their hands, and stood prominently forth, to be adopted philosophically, in relation to man, as it had been practically to animals. It was natural for them to suppose, or rather to take for granted, that domestic animals were the analogues of man in this, as well as other respects. Had it not been for this theory, which unfortunately lay in his way, we think it highly probable Mr. Lawrence would have arrived at the conclusion to which all the facts, and all the arguments he so ably and candidly produced, conclusively led,—that there are distinct species of men.

In the investigation of the probable production of varieties in the human family, from this cause, we will take for illustration the most remarkable example he has furnished, Edward Lambert, the progenitor of the porcupine family. "Let us suppose," says he, in his Lectures, page 387, "that the porcupine family had been exiled from human society and been obliged to take up their abode in some solitary spot, or desert island. By matching with each other, a race would have been produced, more widely different from us in external appearance than the Negro. If they had been discovered at some remote period, our philosophers would have explained to us how the soil, air, or climate, had produced so strange an organization; or would have demonstrated that they must have sprung from an originally different race; for who would acknowledge such bristly beings for brothers!"

The imagination of the learned lecturer was more fertile than the porcupine men would have been, so secluded. The theory has a better foundation in his

imagination, than in Edward Lambert and his successors; for, most assuredly, if they had been so exiled, the question would never have arisen at any remote period. They would have been then, what they are now, either lost by returning to their original types, or lost by defective generation. We say this with great confidence, not only because these "bristly beings" have already disappeared, but because there is not a single fact in the whole of organic nature, to warrant the belief, that a new variety has been permanently produced by such means, except among domestic animals, by the constraint of man: and the constant tendency of such artificial varieties to return to the original type is so strong, that it requires the unremitted care of man, to retain the forms and colors he so artificially produced.

This being the last support of the theory of the unity of the human species, we hope we will be excused for devoting a little more space to it, than it might be thought to require, after what we have said upon the subject of analogies from the animal kingdom.

To understand this subject thoroughly, it is necessary to consider—First: what analogy there is between man, in his natural and voluntary condition, and our domestic animals in an artificial, or involuntary condition. And secondly: what analogy exists between man, providing his own food, and mode of living, and making his own free-will choice of mates; and domestic animals entirely dependent on man, for the kind, and quality of food, and the choice of mates.

Having already, as we hope, satisfactorily discussed

the first question, by showing that man, in a civilized state, has no analogous relation to an animal in a domestic state, we refer our readers to it, without further remark. The second question is so closely allied to the first, that we might rely on what has been already said as a full refutation of any scientific analogy between them. To show conclusively, however, that there is no such relation between them, to support the theory of the unity of the human species, we will show the great judgment, perseverance, and skill, required by the breeders of domestic animals, to produce and continue, a desired variety. It is clear, that if domestic animals are the analogues of man, in the changes they undergo, physically, by domestication, they must also be the analogues for all the conditions precedent to produce the physical changes. They cannot take the isolated fact of changes, without the causes which produce, and the consequences which flow from them.

The first condition necessary for producing variety among animals is, that, previously to any effort for improvement, a certain degree of constitutional preparation must be made, without which all efforts for improvement would be unavailing. By a state of constitutional preparation, we mean, that they shall have been in a state of domestication sufficiently long to have lost the natural constitutional permanency and rigor of the wild state, and to have acquired, by the artificial mode of living, a constitutional pliability which may become more or less permanent according to the art used in reclaiming them. If breeders should take a herd of buffaloes in hand, for the purpose of improving their form and disposi-

tion to fatten early, and on valuable parts, the first necessary step would be to bring the animals to a rigid state of domestication, with a view to a pliability of constitution to receive impressions. How many generations might be required for this preparatory process? It was already done to the hands of the British breeders, by the long domestication of the animals they experimented upon; and yet, what judgment, care, and management, did it require, to produce a desired variety, even by their most skilful men? The talents required for this purpose are of so high an order, that the names of Bakewell, Coke, Colling, and other spirited and scientific breeders, rank with the host of eminent men of that brilliant island.

"The principle that like produces like," says Youatt, p. 523, "extends to form, constitution, qualities, predisposition to, and exemption from disease, and to everyt hing that can render an animal valuable or worthless. It equally applies to the dam and thesire. It is the foundation of scientific and successful breeding."

"Let it be supposed that the cattle of a certain farmer have some excellent qualities about them; but there is some defect which considerably deteriorates from their value, and which he is anxious to remove. He remembers that like produces like, and he looks about for a bull that possesses the excellence which he wishes to engraft on his own stock. He tries the experiment and to his astonishment, it is a total failure. His stock, so far from being improved, have deteriorated.

"The cause of this every day occurrence was,

that he did not fairly estimate the extent of the principle from which he expected so much. This new bull had the good point that was wanting in his old stock; but he, too, was deficient somewhere else, and, therefore, although his cattle had in some degree improved by him in one way, that was more than counterbalanced by the inheritance of his defects. Here is the secret of every failure, the grand principle of breeding. The new comer, while he possesses that which was a *desideratum* in the old stock, should likewise possess every good quality they had previously exhibited;—then, and then only, will there be improvement without alloy. What can a farmer expect if he sends a worthless cow to the best bred bull?

"At the outset of his career, the farmer should have a clear and determined conception of the object he wishes to establish. He should consider the nature of his farm, &c.

"In order to obtain these valuable properties the farmer will make himself master, perfectly, of the character and qualites of his own stock. He will trace the connexion of certain good qualities, and certain bad ones, with an almost invariable peculiarity of shape and structure; and at length he will arrive at a clear conception, not so much of beauty of form (although that is a pleasing object to contemplate) as of that outline and proportion of parts with which utility is oftenest combined. Then, carefully viewing his stock, he will consider where they approach to, and how they wander from, this utility of form; and he will be anxious to preserve, or to increase the one, and to supply the deficiency of the

other. He will endeavor to select from his own stock those animals that excel in the most valuable points, and particularly those which possess the greatest number of these points; and he will unhesitatingly condemn every beast that betrays manifest deficiency in any one important point. He will not, however, too long confine himself to his own stock, unless it is a very numerous one. The breeding from close affinities--the breeding in and in—has many advantages to a certain extent. *It may be pursued until the excellent form and quality of the breed is developed and established.* It was the source whence sprung the cattle and sheep of Bakewell, and the superior cattle of Colling; AND TO IT MUST BE TRACED THE SPEEDY DEGENERACY, THE ABSOLUTE DISAPPEARANCE OF THE NEW LEICESTER CATTLE, and, *in the hands of many an agriculturist, the impairment of constitution of the new Leicester sheep, and the short horned beasts.* It has therefore become a kind of principle with the agriculturist, to effect some change in his stock every second or third year, and that change is most conveniently effected by introducing a new bull. This bull should be, as nearly as possible of the same sort; coming from a similar pasturage, and climate; but possessing no relationship,—or, at least, a very distant one,—to the stock to which he is introduced. He should bring with him every good point which the breeder has labored hard to produce in his stock, and if possible some improvement, and especially where the old stock may have been somewhat deficient; and most certainly should have no manifest defect of form; and that most essential of all qualifications, a hardy constitution, should not be wanting.

"There is one circumstance, however, which the breeder occasionally forgets, but which is of as much importance to the permanent value of his stock as any careful selection of animals can be,—and that is *good keep.* It was judiciously remarked by the author of the agricultural report of Staffordshire that all good stock must be both bred with attention, and well fed." "The original stock will deteriorate, if neglected and half starved, and the improved breed will lose ground even more rapidly, and to a far greater extent."

The Rev. Mr. Berry, in his prize essay says, that "*no breeder need be long in discovering that an improved animal has a greater tendency to defect than to perfection.*"

We have been thus extensive in our extracts for the purpose of furnishing the principles by which varieties are produced in domestic animals. How judiciously, and how perseveringly must the experimenter proceed? How carefully must he guard the property, or quality, when he has obtained it? How carefully must he attend to the food and management of his animals to prevent them from deteriorating? Breeding "in and in" closely, constitutes a kind of hybrid race, by enervating the procreative power. Thus the highly bred new Leicester cattle were speedily extinguished. Where is the analogy, in this state of things, between domestic animals and man? Who will pretend that all, that any, of these circumstances were attended to when the varieties in the human species sprang up? Who will pretend that similar precautions are now, or have been at any time, used to prevent human varieties from re-

turning to their original types? And yet, if domestic animals and civilized man, are analogous, all the circumstances necessary to produce varieties in animals, must have been observed in regard to man, or the analogy is destroyed. A merely accidental variety among animals, will not be perpetuated unless great judgment, care, and management should be exercised by man to perpetuate it. To relax, or omit any of these particulars, is to destroy it. How then, can it be inferred from analogy, that an accidental variety in the human species, without the slightest care, or attention, should become permanent, and the characteristic of millions?

"The native congenital varieties thus produced" says Mr. Lawrence, p. 262, "are propagated by generation, and become *established as permanent breeds*, IF INDIVIDUALS WITH THESE NEW CHARACTERS CONSTANTLY INTERMIX, AND NONE OTHERS ARE ADMITTED IN THE BREED." The constant happening of the contingency he mentions, would be more a matter of astonishment than the birth of the variety; for let us take any one of the human varieties, white, red, yellow, or black, as the archetype of the human family, from whom all the varieties have been produced by accidental births. Suppose him to have been white. The accidental birth of a black child, with the full Negro characteristics, astonishing as it would be, would not be sufficient to establish a permanent variety, however desirable it might be to perpetuate it. He must undergo a preparatory training for a pliability of constitution, and all the circumstances detailed respecting animals must be observed. Another, of an opposite sex, having the same character-

istics, should also accidentally be born, which would be convenient for the theorist, as well as the experimentalist. These must not only intermarry, but all the following cautions mentioned by Mr. Lawrence, p. 263, must be observed, viz.—"In many parts of England all the cattle are of one color: this arises from the long established custom of slaughtering all the calves which have not the same tint. There is no doubt if the same plan were adopted with the human subject,—that is, if persons marked by certain native peculiarities *were united, and their offspring again matched with similar individuals, and* THIS CONSTANTLY REPEATED—any native variety might be fixed as a permanent breed." This might be true, if we also grant, that the procreative energy of the variety would continue unimpaired, which we have good reason to doubt; but we may ask, who is to slaughter, or otherwise dispose of, the children not of the desired variety? They must be disposed of, or the analogy is destroyed, together with the desired variety. It certainly would not answer the experiment to suffer them to remain with the others, on the supposition they would refrain from interfering with its success. And they must not only be disposed of for a generation or two, but it must be "a long established custom;" for Mr. Lawrence observes, with great truth, that "*the disposition to change is exhausted in one generation, and the characters of the original stock return, unless the variety is kept up by the precautions above mentioned, of excluding from the breed all which have not the new characters.*" Who can rationally believe, that such conditions have ever been

observed by the progenitors of any of the varieties of the human family?

But we deny that all the precaution most effectually observed, by slaughtering, or otherwise, for the single particular of preventing intermixtures, would establish any variety among domestic animals. An infinite number of other precautions must also be observed, with equal minuteness and attention. Preventing intermixture with any not possessed of the desired variety, is, no doubt, a measure without which the variety could not be preserved; but there are so many other things necessary to preserve it, that the farmer who should depend on this circumstance alone to perpetuate his variety, would find his error before he could establish it. If this had been the whole art of breeding permanent varieties, the names of Bakewell, Coke, Colling, Berry, and Knight, would not be so highly esteemed at home, —would not have reached the remotest nooks of this western world.

If domestic animals are the analogues of man in a high state of civilization, they were not the analogues four thousand years ago when the most civilized state was a pastoral life. Domestication appears to be absolutely necessary to produce a constitutional pliability in animals, by which varieties are produced. The civilization of man is said to be analogous to domestication on animals, to produce, and confirm accidental varieties. Why do not these accidents happen frequently to the white and rosy beauties of London, by giving birth to black, red, or yellow children? They are certainly more civilized, more domesticated, than any of the beauties of the

ante-historic period, to whom the misfortune is supposed to have happened. Mr. Lawrence anticipates such a difficulty; for he says in his Lectures, p. 263,—"In considering this as an explanation of the mode in which varieties of color may have arisen in the human race, an objection will probably occur that we do not, in point of fact, see Negroes, Mongols, or Americans produced among the white races; nor Europeans among the former. *The theory of the unity of the human species would be untenable if it depended upon proving that such varieties occur.* But the Negro and the European are *the two extremes of a very long gradation;* between them are almost innumerable *intermediate stages* which differ from each other no more than the individuals occasionally produced in the same race differ from the generality of the race." It probably did not occur to the learned Lecturer, that he was not supported by the analogy of domestic animals for these "almost innumerable intermediate" changes, which must occur from a change of color from white to black; consequently it amounted to an abandonment, in this respect, of his analogies, which constitute the foundation of his theory. It is convenient to be enabled to use, or refuse a material at pleasure. We know of no such change among domestic animals. Their changes are apparently capricious, although we know they must follow some law of their being. A white domestic animal, in changing to a black variety, does not proceed by "almost innumerable intermediate changes;" as, for example,—the first offspring a cream yellow; the second a dirty yellow; the third a dingy yellow; the fourth a pale brown, &c.; but

passes from white to black, red, pied, brindled, &c., as it were by leaps. Consequently the analogy fails to apply, and the theory of the human species from this cause also; for, without analogy, it rests exclusively on a supposition which is contradicted by history and circumstantial evidence, extending back for nearly four thousand years.

But we have another objection to this assumption. If the departure from white, to red, yellow, or black, in the human species; or from any of these to white, was as gradual as has been supposed, how did it happen that it continued to progress in the same line of departure, until it arrived at its utmost limit of opposition? Why did it not return to its original type, agreeably to all known laws in regard to varieties, to which it must have had a greater tendency, than to a color and structure which had never been part of the constitution? Why did it not stop short of the ultimate black point? How many ages were required for these gradations, these "intermediate stages," to progress, until they reached their limits, and became permanently constitutional? How came it that some of these changes were arrested in their "intermediate changes," while others proceeded to an extreme black? History bears no record of such changes; and yet history, exclusive of Revelation, reaches far back towards the flood.

Mr. Lawrence continues, p. 264: "Enough has now been said to show that these differences depend on the breed, and that the hue of the offspring follows that of the parents, excepting in the rare cases of native or congenital varieties. The latter examples prove that color is not an essential character of race; that

identity of tint is not necessary to establish descent from a common stock. These occurrences, together with the numerous examples of the widest deviation in color in animals confessedly of the same species, fully authorize us to conclude, that, however striking the contrast may be between the fair European and the ebon African; and however unwilling the former may be to trace up his pedigree to the same Adam with the latter, this superficial distinction is altogether insufficient to establish diversity of species."

We freely acknowledge "that these differences depend upon the breed;" and also "that the hue of the offspring follows that of the parent, excepting in the rare case of native or congenital varieties;" but we deny that "the latter examples prove that color is not an essential character of race." What are these latter examples?

First: "An African Albiness and a European may produce a true Mulatto; the offspring receiving the dark tint through the mother, though she has it not herself."

So far as a single example can prove a general rule, this one is decisive against the theory "that rare cases of congenital variety" produced the diversities of mankind; for this Negro Albiness was not less a Negro for being white; for her offspring, with a European, produced a true mulatto. Another equally strong proof is found in the fact that a Leucœthiop married to a Negro, always produces a full Negro offspring, or an Albino, but never a mulatto.

Secondly: "A black man married a white

woman in York," by whom "she had a child entirely black."

Thirdly: "A Negro was married in London to a white woman who afterwards had a daughter as fair as any one born of white parents, and like the mother in feature; but her right buttock and thigh were as black as the skin of the father."

Fourthly: "Two Negro slaves having married in Virginia, the woman brought forth a white girl. The husband's father was white, his grand-father and grand-mother black; and in every family related to them, there had always been a white child."

Fifthly: "A Negress had twins by an Englishman; one black with short, woolly, curled hair; the other was light with long hair."

Sixthly: "That in a family of six persons one half was almost as light colored as Mulattoes, while the other was jet black. The father was jet black, the mother a Mulatto."

Seventhly: "Several examples of domestic animals, as sheep, cats, horses, rabbits, asses, and peacocks, which produced colors different from the parents."

These are the examples on which he depends to prove that "color is not an essential character of race."

We might possibly account for these "rare cases," satisfactorily, at least to some of our readers, upon the principles of the theory advocated by Mr. Walker, that one parent gives the vital and the other the locomotive system; but we prefer to give them the full force designed by the author. To what do they amount? Will a few examples, which are

clearly, and by acknowledgment, exceptions to an almost universal rule, destroy the truth established by the rule? Against them we give all the examples of all the races of mankind, and ask, on which side does the weight of evidence lie? It is altogether illogical, and unphilosophical to infer any general principle in opposition to a general rule, from a few exceptions which scarcely affect its universality.

In reviewing the difficulties experienced by very eminent zoologists, in their efforts to classify man scientifically in natural history, we cannot see how it has happened that all of these difficulties have been permitted to prevail, when the slightest touch of unprejudiced reason would dissipate them. If the slight exceptions to the universal law of generation, that "like begets like," are supposed to have the weight they have received in the history of man, why are not the like exceptions applicable to the whole circle of sciences? Which of them could abide such a test? We confess we know none but mathematics. Zoology would be unhinged; for there is not a species, genus, order, or class, which does not pass by imperceptible degrees into its neighbors. If to the natural approach to a circle throughout nature, should be added the occasional monsters which are produced among animals, as well as men, and regard them as native varieties, to which the law that "like begets like," is equally imperative as upon the original type;—and if these circumstances were to be regarded as insurmountable obstacles to classification unless they could be removed;—what an awful crash would be heard from the fall of the splendid fabrics of the natural sciences! The labors

of the host of illustrious men who have spent their lives in constructing these splendid follies, have done nothing more than to arrange innumerable materials, in an order beautiful to the eye, but useless from a defective foundation. But to establish this revolutionary doctrine it is necessary for its advocates to establish the fact that "native or congenital varieties of form, like those of color, are transmitted by generation" not only for a generation or two, but so permanently as to leave no doubt on the mind that a new race of men and animals can be formed by such a process. "Nothing," says Dr. Prichard, "seems to hold more true generally, than that all acquired conditions of body, whether produced by art or accident, end with the life of the individual in whom they were produced. Many nations mould their bodies into unnatural forms: the Indians flatten their foreheads; the Chinese women reduce their feet to one third of their natural dimensions; savages elongate their ears; many races cut away the prepuce. We frequently mutilate our domestic animals by removing the tail or ears; and our own species are often obliged by disease to submit to the loss of limbs. That no deformity, or mutilation of this kind is hereditary is so plainly proved by everything around us, that we feel some surprise at the contrary opinion having gained any advocates. After the operation of circumcision has prevailed for three or four thousand years, the Jews are still born with prepuces, and still obliged to submit to a painful rite. Docked horses, and cropped dogs bring forth young with entire ears and tails. But for this salutary law what a frightful spectacle would every race

of animals exhibit. The mischances of all preceding times would overwhelm us with their united weight; and the catalogue would be continually increasing until the universe, instead of displaying a spectacle of beauty and pleasure, would be filled with maimed, imperfect, and monstrous shapes.

The learned author limits these observations to all "acquired conditions of body, whether produced by art, or accident;" but if he had extended his observations a little farther, he would have discovered that accidents of birth, if they do not end with the individual always terminate in a very few generations. "But for this salutary law what a frightful spectacle would every race" of man "exhibit." "These mischances of all preceding times would overwhelm us with disgust; and the catalogue would be continually increasing until the universe, instead of displaying a spectacle of beauty and pleasure, would be filled with Albinos, porcupine men, hairy men all over like a garment, Siamese twins, Cyclops, and 'men whose heads do grow beneath their shoulders.' That no monstrosity of this kind is permanent, is so plainly proved by everything around us that we feel some surprise at the contrary opinion having gained any advocates."

That there are natural varieties in every different species of men, is freely admitted; that such varieties are propagated so as to bestow a family likeness, though an individual difference, is also admitted; and that such varieties sometimes depart so far from the original type as to approach some other species of men, is also acknowledged; but here nature stops, and turns back to the original type, from which the

departure commenced, with remarkable pertinacity and precision. The examples, before given, of the Negro Albiness having true Negro offspring with a Negro husband, and Mulattoes with a European husband, are to the point. But why quote examples to prove the truth of a law, of which the whole family of mankind, in all ages, are standing witnesses? Within certain limits nature is profusely liberal in variety; but beyond these limits she will permit no transgressions, but the punishment of extinction, if the wanderer has not the ability speedily to return. So universally does this law appear to prevail, that we challenge the most patient investigator to produce a single example to the contrary, in the whole human family. We may extend the challenge to the whole of the animal kingdom; for the effects of domestication are not exceptions to the law, since they return to their original types as soon as they are relieved from the pressure of circumstances, the constraints of domestication.

Mr. Lawrence says, p. 260, "The general law, that animals produce their like, by which uniformity of species is maintained, suffers some exceptions. Children do not always resemble their parents; and hence we have occasionally persons produced in each race, with characters approaching to those of the other races. Among the white races of Europe scattered instances of individuals, with skins nearly as dark as those of Mongols, or South Sea Islanders, are not unfrequent. I lately saw a girl, whose dark olive skin and jet black hair, very much like those of a Chinese, joined to English features, made me suppose that there was some mixture of

blood: it turned out, however, that her parents were both English; the mother dark, but not so deep a tint as the daughter, and the father fair."

This quotation is evidently in harmony with the preceding observations; but the design of the author was to lay a foundation for the succeeding examples, from which he intended to infer "that color is not an essential character of race;" and therefore that all men are of one species, but of several varieties. In regard to the girl he saw "whose dark olive skin and jet black hair" made him "suppose that there was some mixture of blood," it was not only necessary, to clear the doubt, to ascertain "that her parents were both English;" but also to trace back, for four or five generations, particularly on the mother's side, who was "dark," to ascertain if there was not some remote mixture; because it is a known, and a very singular fact, that some remarkable peculiarity of a progenitor may disappear for several generations, and suddenly re-appear; as if it were the flickering of a dying lamp, which becomes more and more irregular, until, suddenly, it is lost for ever. But let us suppose her to have been dark without any mixture of blood: nay, let us suppose, what has never yet happened, that she was jet black, as Albinos are pearl white, would a single example of so strange a freak of nature, be thought sufficient to outweigh millions of examples to the contrary, annually being born, bearing the true types of the parents? About 33,000,000 of children are born annually in the world, reckoning the whole population of the world at 1,000,000,000, and the average duration of life thirty years. Each individual of all these

millions has some peculiarity, by which he or she may be distinguished from every other, and generally some peculiarity, resembling the parents. Is it surprising that these efforts of nature to preserve a likeness, and to produce distinct individuality, so important to the harmony and well being of the race, should sometimes run into excess and produce a monster? Is it not more surprising she so seldom errs? And yet more surprising, when she does commit an error, by reason of her lavish goodness, she so speedily repairs it, by recalling the wanderer, or suffering it to expire in a short time? Is it not manifest, that if it should happen that a black child should be born to white parents, that it could not propagate a black race, any more than the Negro Albiness propagates white children? Is it not evident that the progeny of a black child born of white parents, if such a freak of nature could arise, would return to its natural type, as those of the Negro Albiness returned to theirs?

It appears, therefore, to be a law of nature applicable to every species of man, that variety of form and shades of color, to any degree consistent with the limits of species, may arise, and frequently occur, for wise purposes; but beyond the limits of species it is never tolerated, or sanctioned.

This is a most remarkable law, particularly as it does not appear to prevail with any of the class mammalia, but man; the reason for which we will endeavor to explain, when we treat of those laws which have kept all of the species of men distinct for ages, and probably will for ever.

We remark, in conclusion, that too much import-

ance has been attached to a few,—to individual examples; too many important inferences have been drawn from casualties not of sufficient importance to amount to exceptions, while the universal law of nature, if not disregarded, has been postponed in its operations, that a favorite theory might be sustained. Almost anything can be proved, if single examples are sufficient for the purpose. Humboldt, in Sout America, saw a man suckle a child, for which he had sufficient nourishment. We might, with equal propriety, suppose, that, under favorable circumstances, he could propagate a race of men with female mammæ and lacteal apparatus, as that the porcupine men, or other "congenital" monsters, could perpetuate a new variety, a new species of men.

We therefore conclude that no "inferences can be drawn from accidental varieties springing up in the human family, to enable us to account for the differences observed among men."

CHAPTER XI.

THE PSYCHICAL ATTRIBUTES PECULIAR TO MAN.

The spiritual or mental powers of man have been, in general, called faculties. Sometimes they have been called attributes; but it has only been in a loose sense, and designed to be understood as synonymous with faculties. The two words, however, have very distinct significations which should be preserved. Attribute, from the Latin *attributio*, signifies a gift, an assignment. In this sense we use it to denote the original powers of the mind, given, assigned to, or bestowed upon man by the Creator. Faculty, from the Latin *facultas*, changed from *facilitas*, signifies apt, ready, dextrous, &c. In this sense we use it to denote the facility acquired by education, exercise, or experience, to accomplish any thing. Hence the word attribute signifies the original endowment, or germ of moral and intellectual capability, the gift of the Creator, in contradistinction to faculty, which is a facility, a readiness, an expertness, acquired by man by exercising the attribute, and developing its power; just as the muscles and limbs of man are the gift of God, but their strength and dexterity in particular employments result from cultivation. Without an attribute there can be no faculty, as there can be no superstructure without a foundation; but without a faculty there may be an

attribute, as there may be a foundation without a superstructure.

The word attribute has been more frequently appropriated to express the perfections of the Deity; as goodness, mercy, justice, &c.; but it is plainly inapplicable to a Being self-existent, and self-endowed, in a literal sense. For the want of a word to designate what is to us, and must always be, incomprehensible, man has bestowed upon the Creator certain perfections, and calls them attributes, because he has assigned them to Him,—a species of impiety which can only be justified by the barrenness of language, and the limited power of the human mind to comprehend an Infinite, Uncreated Being.

We also call them attributes rather than faculties, because these last have often a technical physical and physiological signification, incompatible with spiritual agency. The faculty or facility of doing anything may arise from mere habit, when it is a mere physical property, qualifying the physiological constitution: or it may arise from a peculiar idiosyncrasy, not common to the species, when it depends upon physiological constitution operating upon the functional, which qualifies the physical system.

Lastly, we call them attributes to distinguish them from instincts more perfectly than if we should call them faculties. Man has instincts as well as psychical attributes; but animals have no psychical attributes,—nothing of a moral constitution, and nothing of a mental constitution, if by this last we understand something superior to and controlling instinct, having a capability of progressive development.

We know that we are, in appearance at least, if not in fact, opposed in this opinion by high authority. Dr. Prichard, in his Natural History of Man, from page 66 to page 74, has devoted a sub-section to the consideration of the "Psychological characteristics of Animals." We think it is only in appearance, and not in fact, that he is opposed to us in this matter; because although he has entitled his sub-section, "Psychological Characteristics," the whole body of the section is exclusively confined to "instincts and habitudes." In a few instances he uses the adjectives "psychical" and "psychological," but always as synonymes of instinct or habit. We might therefore suppose that he selected this word for the title of his sub-section, because it was less hackneyed than instinctive, if we did not know him to be a well bred scholar, and a writer in a classic tongue. As a ripe scholar, however, he should have known that the word has a definite signification inapplicable to "the beasts that perish," until he had first proved their title to it. He attempts no such thing throughout this sub-section, indeed we may say, throughout his book; and yet the principles here taken for granted form the groundwork of every important conclusion in his work. He has endowed animals with a soul, or a mind resulting from a soul, with as little difficulty as his fellow pupil, Lawrence, expunged the soul from man in his Lectures, because he could not find it "amid the blood and filth of the dissecting-room." Thus Mr. Lawrence does his best, scientifically, to take the soul from man; and Dr. Prichard makes as strong an effort to give it to brutes. The difference between them is that the

first is niggard, and the last prodigal, of the most important and valuable property belonging to the race. In the name of the American people, at least, if not of the whole human family, we protest against the abstraction, or the transfer. We, of this continent, will stand where the Creator placed us, when He made us a living soul in His image and likeness, and gave us "dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth."

His theory, the unity of the species of man, required that animals should be analogues of men. It was, therefore, highly important that, as he was then laying the foundation for all his future arguments and conclusions, he should elevate animals to the proper eminence to be analogues; rather than, as Mr. Lawrence did, sink man to the level of brutes. It was an ingenious contrivance by which he could gain all the advantages, and escape the censures of the learned Lecturer. It is so simple a contrivance too,—merely substituting the word "psychological" for "instinctive" "characteristics," and the whole animal kingdom would instantly rise to the proper platform to be the types of the human family. To get the psychology of animals and men thus related, without the trouble of philosophically accomplishing so impossible a thing, by the mere use of a word, was an ingenious, though not an ingenuous achievement. It gave him a specious right to use bees and wasps, rats and dogs, sheep, goats, and rabbits,—in short the whole animal kingdom,—as hu-

man psychical analogues, which would be amazingly convenient when conclusions were to be made.

But we seriously object to this legerdemain method of reaching an object. Words were not made for such a use, but for the nobler purpose of conveying accurate thoughts, and sound arguments. There are, no doubt, many legitimate analogies to be drawn from the animal and vegetable kingdoms, which may be advantageously used to illustrate the natural history of man; but this abuse of words, for the sole purpose of forcing analogies to bolster a theory, is highly objectionable and unphilosophical. Indeed we hesitate not to say that a true and scientific knowledge of the natural history of man has been infinitely more obstructed, than benefited, by the extremely liberal use of analogical arguments, to the almost total neglect of human comparisons and history. To such an extent has it been carried, that our most labored scientific works on man may be read for instruction, in regard to animals and vegetables, with more profit than that which they profess to teach. Let us now return to our subject.

The psychical attributes of man are, adoration, benevolence, conscientiousness, intellectual appetite, prudence, admiration, fame, speech, and reason, or causality. In this list we do not pretend to have enumerated all the characteristics of the human mind; but only such as are peculiar to man, and in which no instinctive animal partakes. We will endeavor to explain them in the order they are named.

No people have yet been discovered without a religion of some kind, or a belief in spiritual agency in the government of the world. With very few

and trifling exceptions a universal belief prevails of a future state of rewards and punishments, and a necessity for human conduct to conform to certain modes of action to obtain the one, and avoid the other. This principle of our nature we have denominated adoration, a word which does not fully express the idea, but is the best we can think of. If we were permitted to coin a word, *Adorofidation* would express all implied by adoration and faith, which would be more explicit. But we retain the word adoration ; which, as it signifies the act of praying, or homage, almost necessarily implies faith in the Being addressed.

It is the same principle whether it is manifested towards God, the uncreated Spirit, Juggernaut, Odin, the sun, or the hosts of Egyptian, Grecian, or Roman mythologies. It is the same principle which prompts the civilized Christian to believe in the highly spiritualized truths of the Gospel, and the savage of our forest to believe in his southern, evergreen woods, filled with game.

The progress of man from a belief in one Uncreated, Self-existent Being, downwards to the lowest degree of Fetishism, and the subsequent elevation of part of the race, we think may be clearly and satisfactorily traced. It is a curious and interesting part of the natural history of man to trace, in the different species, the spiritual part of their worship, and the modes and causes which led to the various corruptions, by which idols were made objects of adoration, instead of the One Uncreated God. All the religions of the world had, no doubt, a common origin. Obscured and gross as most of them are,

they all have veins of spirituality running through them, by means of which their common derivations may be traced. The Brahmins and Parsees could never have arrived at the spiritual conclusion, that man had a soul which emanated from the Godhead, and which, at death, returned to Him, by any supposed perfection in their philosophy. The contention between the ancient Arabian philosophers, and the gymnosophists of India, about the resurrection of the body, or of the soul without the body, never could have originated with either of them, as it regards the belief upon which such notions are founded; but must have been derived from a common ancestry, or from an original stream, the source of which was forgotten or overlooked. Every form of religion, which has a foundation upon spiritual agency, or existence, whether of the ancient Scandinavians, the Celts, the Aztecs, the Peruvians, the American Indians, or the still more benighted Africans, the doctrines of which relate to future rewards or punishments, must, in our opinion, have had a common origin. We conceive it to be utterly impossible rationally to suppose that any idea of the existence of spirits, or of future retributive justice, could be conceived by the mind, without the direct communication of the Creator, or an innate principle of human nature. The utmost stretch of human reason could not assign to man an existence after death. There are no physical facts to lead to such a conclusion; on the contrary they are all opposed to it: and yet some idea of a future state is as firmly rooted in the mind of every savage who roams our forest, as it is in the Christian whose faith is derived from the very

fountain from whence has flowed this fundamental principle of universal belief. It cannot be derived from an innate principle of our nature. If it were, all men, everywhere, and in all societies, would possess it inherently, and it would manifest itself in the same manner among all barbarians; but it manifests itself so variously among different people, that it is absolutely inconsistent with an innate, or instinctive principle, but is perfectly consistent with traditionary knowledge.

We say that philosophy could not teach this fact to mankind, because the whole physical world, and all the analogies it affords, are opposed to it. If it could, where did the ancients, the shepherds and tillers of the ground, nay where did the wandering savages of the woods, get the philosophy to teach them? So far from teaching a spiritual existence, it has been with considerable difficulty that some of our most ingenious philosophers of this advanced period of the world, have been prevented from convincing the learned that there were really no physical substances. These facts are trumpet-tongued in favor of the divine inspiration of the Mosaic record.

The early mythology of every people is one of the best means of ascertaining the nice shades of character which belongs to them; for although, as we shall presently see, all people, who had not the special superintendence and guidance of the Almighty, fell from the worship of the living God, yet the peculiar features of the geogony of each species took a corresponding hue from their specific characters, distinguished from the others.

All the mythologies of the ancients may be traced

back to one original source, however perverted they became in the progress of time. All the hordes of the patriarchal period started from Shinar with the belief in one uncreated, eternal Deity. The one stream, which passed into Hindostan, called the Creator Brahma, and gave him a triune person and power. Another stream passing into Persia worshipped the same uncreated Deity through the sun as his peculiar image; which soon became further corrupted by being transferred to other sensible objects, as the moon, stars, fire. Another stream passed into Egypt, in which the settlers soon divided in their religion. Those of the Thebais, in Upper Egypt, continued the worship of the uncreated God, and were exempt from taxation to support the sacred animals of Lower Egypt, long after these last had become worshippers of animals. Another stream passed up the Euphrates to Syria and Asia Minor, and were probably the Pelasgians, who were pressed by successive hordes into Greece and Italy. These Pelasgians, before the Egyptians and Phœnicians settled among them, and corrupted their religion, preserved the worship of the living God in considerable purity. Herodotus says, Book II., Chap. 52, "The Pelasgians, as I was informed at Dodona, formerly offered all things indiscriminately to the gods. They distinguished them by no names or surnames, for they were hitherto unacquainted with either; but they *called them gods, which by its etymology signifies disposers, from* observing the orderly disposition and distribution of the various parts of the earth. They learned, but not till a late period, the names of the divinities from the Egyptians, and Bacchus was the last whom they

knew." "But," says Mitford, vol. I., pp. 63-4, "in addition to the strong testimony of the Dodonean priests reported by Herodotus, we find in the works of Hesiod traces of oriental tradition evidently older than any worship of the celestial luminaries. His golden age, plainly foreign to all Grecian history, bears remarkable analogy to the Scripture account of the terrestrial paradise, and the state of man before the fall. 'The first race of men,' he says, 'lived like gods in perfect happiness, exempt from labor, from old age, and from all evil. The earth spontaneously supplied them with fruits in the greatest abundance. Dying at length without pain, they became happy and beneficent spirits, appointed by the divine wisdom to the royal function of superintending the future race of men, watching their good and evil ways.' His silver age" continues Mitford, "is not less remarkably consonant to the scripture account of the ante-diluvian world after the fall. 'The second race of men,' he proceeds, 'were like those of the golden age neither in nature nor moral character. They scarcely reach manhood in a hundred years; yet not thus less subject to pain and folly, they died early. They were unceasing in violence and injustice toward one another, nor would they duly reverence the immortal gods. Jupiter therefore hid this race in his anger, because they honored not the blessed gods of heaven.' In speaking of the third race of men," Mitford proceeds, "which he calls the brazen race, the poet at length comes home to his own country, describing exactly that state of things of which Plutarch has given a more particular account in his life of Theseus."

Thus we see that all the hordes, when they departed from their original centre carried with them to the north, south, east, and west, the same grand element of adoration, directed to the same common object. The question now falls back upon the reasons why the corruptions, which subsequently took place, differed so widely from each other in regard to the modes and objects of worship, and the different influences they have produced upon the ultimate destinies of the different people.

A solution of this question can only be expected by a careful examination of the social condition of all the earliest people of antiquity, of whom we have any knowledge. The materials are scanty; but they are sufficient, we think, to lead to just conclusions. We have seen that the original streams of emigration carried with them the original belief of the only living uncreated God. History is also unanimous in affirming, that a tendency to corruption universally prevailed; and that even the Jews required the continued superintendence of the Almighty to prevent them from becoming idolaters.

The first important fact which presents itself to our consideration is that the different races of men actually took different, and for the most part opposite routes, in their emigrations from the common centre. The only confusion appears to have been in the south western stream. In this direction a part of the Negroes appears to have been preceded by the ancient Egyptians; and they were arrested in their progress, for a time, at least, in the North of Arabia. It is probable that these Asiatic Negroes, thus arrested, became the ancestors of the Abyssinian Negroes, the

Foolahs, Mandingoes, &c., and the Malays and others of the Pacific Islands. This subject, however, belongs to the history of each species, and would lead from our present object. All the other streams appear to have advanced without clashing, and without interference. The northern stream, up the Euphrates, and probably up the Tigris, appears to have been exclusively Hamo-Shemitic, mixed with pure Shemites. Abraham was considerably advanced on this route when he was called to separate himself from his brethren. We know of no dark race having settled west of the Euphrates, and north of the Mediterranean, except the Colchians; who were left behind by an Egyptian invading army, long after the country had become settled by the Shemitic family. The Japhethic, or yellow race, passed to the south and east of this point, in masses, and occupied the whole of Eastern Asia. The Ishmaelites took and kept possession of the greater part of Arabia, and by their expansive force, as nomadic Scythians, hastened the progress of the other races to their several destinations.

The whole of this extraordinary arrangement for the disposition of the entire masses of the several species to distinct geographical limits and abodes, notwithstanding the violences, corruptions, and disorderly barbarisms of this early period, bear the undoubted evidences of the controlling agency of Infinite Wisdom, directed towards an end. And now, at this distance, and this elevation, we can view the busy scene with a full knowledge of part of the end to be accomplished. We behold, with delight and surprise, a chosen people separating from the mass of

the Hamo-Shemitic family, to become the depositaries and preservers of a knowledge of the uncreated God, for the future benefit of mankind, when all the rest of the world was about to lose it. We also behold all the remainder of the world dividing into two disdinct forms of paganism, the Personified, and Symbolical. And we behold, also, the still more remarkable circumstance, that every dark race, without exception, assumes the symbolical form, varying somewhat in shades and features; while the whole Hamo-Shemitic species destined to have their homes in Europe, as universally take the personified form. Two settlements of Hamo-Shemites are preserved in the patriarchal civilization on the borders of the Mediterranean, Egypt, and Phœnicia, and one in Chaldea, for distributers of the rudiments of knowledge, which are to be absorbed after this duty shall have been performed. Why is all this remarkable regularity, order, and arrangement, amidst all this apparent confusion, disorder and chaos? Let us stop to inquire, for it forms a grand feature in the natural history of man.

It has been well said by Mitford that "in all countries, and through all ages, religion and civil government have been so connected, that no history can be given of either, without reference to the other." We go farther and assert that no history of religion and civil government can be written, to convey a thorough knowledge of original impulses of policy and conduct, without a history of sexual relations, or domestic arrangements, and constitutional temperaments; because these are the foundations upon

which religion and government are built. We will endeavor to make this apparent in a future chapter.

We have seen that the original form of government was patriarchal. It necessarily sprang up with families, and became strengthened by the long lives of the patriarchs. It must also be evident that each patriarch must have impressed upon his little community his own domestic laws and morals; and that these would take a direction according to his own temperament, producing certain moral and civil impulses. There is certainly a national, as well as an individual constitutional temperament. The patriarch, being the type of the temperament of his species, gave form and substance to the manners, habits, and customs, of the community he governed. But the contrasts between the dark races, though strong in details, were by no means so accurately defined, and well marked, as between all of the dark, and all of the white races, upon broad and general principles. The differences became visible immediately after the different hordes arrived in, or near, the countries which were to be the theatres of their future operations in the great drama of the progress of mental and moral development. The whole Pelasgic family, and the Cimmerians, who were destined to act on the stage of Europe, left polygamy in Asia, and entered upon their high duties with pure sexual relations. A reform of the domestic circles immediately reformed the government. Democracy superseded patriarchy by the mere fact of dividing domestic influence into so many parts each equal to the other, that the patriarchal authority was lost by being diffused. Hence

the little, petty states, or clans, into which all the Shemitic nations were broken, and the principles of liberty which prevailed among them universally. Hence, too, we see the reason why in all of Asia, governments consisted of large masses, and despotic forms. In every Japhethic, in every Ishmaelitic, and the few Canaanites, with whom we are acquainted from ancient history, the patriarchal form of government only changed to absolute despotism. The patriarchs naturally assumed, and the despots who succeeded them, usurped, the right of being high priests for the people. With the early patriarchs it was a matter of duty; with the despots it was a matter of convenience and policy, to direct the consciences, and expound religion, for the people. Religion became the chief machinery of state government. Hence among all of these nations is found, in their earliest histories, a separate priesthood distinct from the body of the people; as the Magi in Central Asia; the Brahmins in India; and the Priests in Egypt. These religious orders constituted the nobles of the country, were instituted by the monarch, and formed at once the bulwark and the power of the throne. The learning of the age was exclusively confined to them: and as religion was the great instrument of power, it is not surprising that an order of men, exclusively devoted to the subject, should multiply the objects of adoration, which, at first, were symbolical of the uncreated God, but soon degenerated to absolute corruption. In China the patriarchal form continued in greater purity; for the Emperor retained the consciences of the people in his own hands, without the intervention of a separate priesthood.

Consequently, in this country there is no separate order of nobility, and the celestial government is itself the only symbol of heaven. This very simple form of paganism answered for the passive Japhethites; but the restless and turbulent Ishmaelites required and obtained a more artful, a more attracting, and a more complicated machinery.

We have said that in all of the Shemitic races the patriarchal influence, as a form of government, was destroyed; consequently, the popular religion developed without a distinct priesthood, and only acquired consistency and order in the progress of time, through their poetry. Homer and Hesiod were the holy books of the Greeks and Romans, as other poems were, probably, before them. The Edda and Voluspa were the sacred books of all the Scandinavians; and Ossian tells us that the souls of the Celts "wander in thick mists beside the reedy lake; but never shall they rise, *without the song*, to the dwelling of winds."

In the hands of such priests can we wonder that the religion of all the Shemitic family became personified? That men became Gods by being benefactors of the race, instead of by order of primogeniture? If the Egyptians and Phœnicians introduced their gods to the Greeks, they were speedily changed from the symbolical to the personified form. The gloomy and ponderous machinery of a symbolical religion, was at variance with the sprightly and eager constitutional temperaments of the Greeks.

In view of these circumstances, can we wonder at the vast disparities in the different races of men? Can we not read in them their destinies almost as legi-

bly as if they were written down for our edification? Can we not see the passive, vain, Japhethite, submitting for thousands of years, in almost the same condition, to the despotism of a patriarch, the pretended vicegerent of God, whose empire is heaven upon earth? Can we not see the callous Ishmaelite, submitting also to a patriarchal form of government; but demanding exciting symbols—Fire and Mohammedanism—for his faith; restless, ruthless, and devastating? And can we not see the poor Canaanites, whose sluggish temperaments made animals the symbols of adoration, sink so low that we have no name to designate their degradation as appropriate as their own Fetishism? But behold the Shemitic species which threw polygamy, patriarchy, and symbolical religion from them in their march to their new homes—which never fell lower in idolatry than the worship of Virtue, personified in their heroes; can we not see, in their very errors and excesses, the strenuous temperament which prompted them to love Virtue, and to personify her, that she might be the object to stimulate the ambition of every one to excel? Can we not see that the personified paganism of the Shemites was the kind of soil in which true religion would grow more readily, and vigorously, than in any other whatever? Can we not see that the transition was comparatively easy from adoring virtue in the human spirit, to the author of all good, in God, the Spirit? Can we not see that the very virtues and wisdom, generated by the ambition fostered by personified religion, must, necessarily, in the progress of time, beget a Socrates, and many others scarcely inferior, who would discover the fal-

lacy and folly of ascribing to any creature the powers of the Creator? Do we not see that the mythology of Greece and Rome actually tottered to its base under the weight of philosophy generated by its own energies? And when, from its weakness, it became dangerous, and threatened, by its fall, to bury the whole civilized world in its ruins,—do we not behold others of the great Shemitic family, more simple and more pure in their hero-worship, because they had never been benefited by the knowledge, nor injured by the corruptions of Egypt and Phœnicia, opportunely coming to save civilization and religion from utter extinction?

We have thus seen that the great principle of adoration is universal in the race, and that the various objects to which it is directed are chiefly influenced by the constitutional temperaments of the different species. The comparative strength of the original principle in the different species is a question of greater difficulty, than to trace the results produced by the constitutional temperaments of the different species. Whether manifested towards Jupiter, Odin, Brahma, the Sun, the Fire, Mohammed, or the true Divinity, the principle appears to be equally strong in the human breast. Nay, it may be said, as a general remark, that the more gross the object of adoration, the more universal is the veneration paid to it: and the greater the sacrifices it requires, and the more numerous and imposing are its outward forms and ceremonies, the more powerful is the principle of adoration exercised. Juggernaut has more victims, Mohammedanism more fanatics, than Christianity. And, of Christians, the Roman church holds

her people by a stronger grasp than the Protestant. But a gross and formal religion is unfit for a high state of intellectual improvement. In such a state men see the true boundaries between sensual and spiritual objects; and external forms and ceremonies, except as they are manifestations of sentiments and feelings, pass for nothing. God, as a spirit, must be worshipped by man in spirit. But it requires a high degree of intellectual power to comprehend the Almighty sufficiently to adore Him, without the intervention of some symbol to obscure His glory. The eagle only can look at the sun.

It is customary to account for all the distinguishing traits of national and intellectual character of the different species of men, by reason of the difference of education, religion, and government. Giving to the causes their full influence upon human character, and they are acknowledged to be considerable, they are insufficient to account for the vast differences which prevail among the several species. There is something behind education, religion, and government, which has frequently been called genius,—which we have named constitutional temperament,—and which we have distinguished among the several species by Strenuous, Callous, Passive, and Sluggish,—which gives to each species a direction in education, religion, and government, in harmony with its impulses. It is the embryo man; and its development gives to him, especially in his start in the race of civilization, those crude, but essential, first principles, which lay the foundation for his education, religion, and government. None of the human attributes more strikingly manifests the truth

of this remark than adoration. Why did not the Ishmaelites of Arabia continue the Christian religion, as well as the Shemites of Europe? How came they, after having had the Bible among them for nearly six hundred years;—their country the theatre of many of the miracles and events it records;—how came they to throw it aside, and adopt a sensual imposture, instead of the pure, spiritual doctrine it contains? The answer is found in the history of this people from the earliest period,—carried out in the history of the Saracen Empire,—a history filled with blood and desolation,—scenes suited to the character of the people, and in conformity with their specific temperament. Why, again we ask, do the great body of the Japhethites yet continue the patriarchal government, and make it the symbol of God and heaven; shut themselves up within their walls, and submit themselves to the rod, like a nation of children; learn by rote, and practise from experience, through ages of identity? The answer can only be found in their passive constitutional temperaments.

Benevolence is also an attribute peculiar to man. None of the human virtues places the creature so near to the exalted character of the Creator, as benevolence. It is a duty, it is true, which we owe to every creature in the universe of God, because we are fellow creatures of His creation; and fulfilling a duty can scarcely be said to entitle us to an alliance with Him who imposed it. But if every individual of every species of animated nature, has its peculiar joys and sorrows;—its pleasures and pains;—its life and death;—then is it more god-like, in man, to promote joy, rather than sorrow;—pleasure than pain;

—and life than death. It is, as it were, becoming a co-partner with God in executing the design of creation; for if the benevolence of the Creator designed every creature to be happy (and who doubts it?), then the benevolent man, by doing what is in his power to produce happiness, becomes a co-partner in executing this design. It is exclusively a divine and human virtue. It descends no lower than man. Devils would cease to be such if they possessed it; and the beasts of the field know nothing of it. They have love for their young, and love for their mates; but the love which not only embraces the whole of a species, but the whole of animate creation, is a high moral principle, and is the feature which more strikingly exhibits our likeness to Him, in whose image we were made, than any moral feature we possess.

It prevails as universally among the race as adoration; for it manifests itself, in some way, among the most rude and barbarous people, and is more emphatically a female, than a male virtue. "I have observed," says Ledyard, "among all nations, that the women ornament themselves more than the men; that, wherever found, they are the same kind, civil, obliging, humane, and tender beings; that they are ever inclined to be gay, and cheerful, timorous, and modest. They do not hesitate like man, to perform a hospitable or generous action; not haughty, nor arrogant, nor supercilious, but full of courtesy, and fond of society; industrious, economical, ingenious; more liable to err, in general, than man; but, in general also, more virtuous, and performing more good actions than he. I never addressed myself in

language of decency and friendship to a woman, whether civilized or savage, without receiving a decent and friendly answer. With man it has frequently been otherwise. In wandering over the barren plains of inhospitable Denmark, through honest Sweden, frozen Lapland, rude and churlish Finland, unprincipled Russia, and the wide-spread regions of the wandering Tartar, if hungry, cold, wet, or sick, woman has ever been friendly to me, and uniformly so; and to add to this virtue, so worthy of the appellation of benevolence, these actions have been performed in so free, and so kind a manner, that, if I was dry, I drank the sweet draught, and if hungry, ate the coarse morsel, with a double relish."

A similar beautiful illustration of the universality of this principle, might be quoted from travellers in Africa, where the poor and oppressed negresses not only relieved the necessities, but cheered the heart of the lonely wanderer, by an extempore song in pity of "the poor white man."

But, although the naked principle is universal, the first step has yet to be taken for its active development, by all the dark races. A certain degree of hospitality, sometimes amounting to a generous liberality on special occasions, occurs among them; but anything like a general benevolence, such as is exhibited on a large scale by the Shemitic species, is altogether unknown to them. It is the principle alone, in its most narrow and contracted sense, which has been exhibited by any of the dark races. Limited as it has always appeared among them, its intrinsic loveliness always recommends it to the heart; and when we hear of "the poor white man"

being compassionately relieved by the oppressed negresses, we feel as if it were impossible to deny to them an active principle of universal benevolence, although the act is entitled to no higher dignity than humanity. As faithful historians, however, of the species of men, we are compelled to say that we are not acquainted with a single act of any expanded benevolence by any of the dark races. It is probable that high manifestations of this exalted virtue always accompany a highly improved intellectual condition. Such appears to be the fact, when we contemplate only the Shemitic species. Almost all the noble institutions, which shed so much lustre upon our species for benevolence, are of modern date. But although it is true that an extensive beneficence, which is the overt act of this principle, may require a high degree of intellectual power, yet the will to do good, as the simple exercise of the heart, has, at all times, been more apparent in the white species, than in the dark races. In the early history of all people, war constituted a chief occupation of all men. There has been no time, within the reach of tradition or authentic history, that the Ishmaelites were not intellectually more cultivated than the whole north of Europe, when she poured her barbarous hordes over the Roman Empire; and yet the wars of these uncultivated people, in regard to wanton destruction of life and property, bear no comparison to the mildest form of this horrid scourge, when exercised by the Ishmaelites, during their highest degree of intellectual improvement and civilization. Instances of great cruelty and destruction undoubtedly there are in the wars of the Shemitic species;—the de-

struction of Carthage was one;—but they can generally be traced to some supposed necessity for self-preservation, some sudden outbreak of passion, or individual examples of depravity in kings or generals. But wanton cruelty and devastation has never been a characteristic of the white species, as it has uniformly been of the dark races. With those, the instances are comparatively rare, and evidently exceptions to their general conduct; while with these, the general conduct is strongly marked by wanton inhumanity, rapine, and devastation; while instances of humanity are rare, as the contrary are in the white species. There is, then, a decided difference between the white and dark races, in their natures, in respect to the principle of benevolence.

The innumerable noble institutions scattered over every Shemitic nation, projected and endowed as well by governments as by private associations, and even individuals, are so many temples of Benevolence, where she is busy in works of beneficence for the destitute of the world. The aged matron, the infant orphan, the blind, the lame, the deaf and dumb, the sick in body or in mind, the inebriate, and every other ill that flesh is heir to, may find, in some one of these temples, hearts to weep with them, and minister to their wants. Nor is it alone our own social afflictions which call for the deep sympathy of this benevolence. The whole world is the active theatre of her beneficence. From the portals of these temples may be seen to issue, in constant streams, hosts of men and women, bearing to all parts of the world precisely the succor the destitute require, without the hope of any reward but

the sweet satisfaction of having done all in their power to ameliorate the condition of the ignorant, the miserable, and the wretched. A famine, a pestilence, an earthquake, or any other great calamity, calls forth her active ministers to administer relief to the utmost stretch of their ability. Nor do they stop to inquire whether the sufferers are white, red, yellow, or black;—Christians, Mohammedans, or Pagans;—the ship is freighted, and flying on the errand of charity, whatever may be their color or religion. None of the dark races has at any time been occupied in such labors of love. We dare not say that they are incapable of them; but we may say that, as they have lived in the world as many thousands of years as the white species, without yet having taken the first step beyond the original principle, we have no reason to suppose they will, at any future time, make any advance, unless by the teaching of the Shemites.

We feel incompetent to draw a parallel between the individual species of the dark races, in regard to benevolence. The facts before us are insufficient for the purpose. Travellers have not sufficiently attended to the thousand little things which contribute to form national character, especially relating to human attributes: and although enough is known of them to warrant the general conclusion, that the principle is universal among mankind, yet the dark races evidently approach each other so closely, in this respect, that the difference among them depends on nicer shades of coloring than we have now the means of describing accurately. We are inclined to believe, however, that future inquiries will discover

the Ishmaelites to be the highest, the Canaanites next, and the Japhethites lowest, in the scale of this exalted virtue.

Conscientiousness is the next human attribute in our list. It is evidently as universal as the two which have preceded it. A sense of mine and thine,—in other words, of individual rights and possessions, prevails among all people. It is a theory with legal writers, and among them of Sir William Blackstone, the elegant Commentator on the laws of England, that, in the original state of man, there was no right of property, in any individual, beyond its mere personal use and occupancy. Such a theory is entirely a creature of the brain; for the patriarchal age was also one of government; and although it is highly probable there were few objects of exclusive individual property, no doubt ownership of property, in perpetuity, was as sacred then as it is now. "Cain was a tiller of the ground," "and Abel a keeper of sheep." Both of these pursuits necessarily imply exclusive possession of property. Offences against society are of two kinds; those which are prohibited by the natural law of our constitutions, which are evils in themselves, independently of human enactments, which lawyers call *mala in se;* such as thefts, robbery, perjury, and murder, all of which affect the conscience by natural instinct; and, secondly, those which are merely prohibited by human enactments, *mala prohibita,* which are not binding on the conscience, and derive all their force from the penalty of the law. Such, for instance, would be a law that prohibited the exportation of wool, or any other article, under a penalty of one

dollar for every one hundred pounds. This penalty would be equivalent to an export duty, and conscience would not interfere with the exportation, if the penalty were paid.

All offences against the natural rights of persons, are offences against conscience. It is the small, still voice, which whispers to the heart of the savage and the civilized man, in regard to such matters as relate to the natural rights of individuals. Education may blunt or pervert, but never wholly eradicate it. Spartan youth were taught to steal; but they were also taught adroitness and secrecy in accomplishing it, which prove the natural evil of the act. Nothing which is naturally right is done by stealth. The savages of New Holland, who are represented as among the most degraded of human beings, knew perfectly well, on the first visit of the Europeans, that, when they committed a theft they deserved punishment, for they ran off with the article stolen. No people have yet been discovered so deficient in moral sense as to commit a crime against nature without being conscious of it. The first murderer told a falsehood to hide his crime. "And the Lord said to Cain, Where is thy brother Abel? And he said, I know not. Am I my brother's keeper?" He was also conscious of deserving the punishment of death, before such a doom had been pronounced against him, and without any previous example; for he said "I shall be a fugitive and a vagabond in the earth; and it shall come to pass that every one that findeth me shall slay me."

The notion, therefore, that a state of nature is, or ever has been, a condition of absolute absence of

property, except of use and occupancy, and of moral sense arising from the relations of individuals, has no foundation in any history of man, sacred or profane. It is clearly contrary to his spiritual constitution. We have seen that adoration and benevolence are natural features of this constitution; and conscience is necessary to enforce their performance. In the language of lawyers, these two great principles may be regarded as the declaratory part of the natural law upon the human heart; and conscience may be termed the *sanction*, or *vindicatory* part of the law, without which the declaratory or directory part, would be of very little avail.

Education has, undoubtedly, as powerful an influence over this as over any other attribute. Of all of God's creatures, man is the only one that improves or degenerates by his own education; nor could a voluntary, responsible agent be otherwise constituted. Education is the great instrument for the progressive improvement of men. It is, consequently, necessary that the great moral attributes, the principles of which have been bestowed upon us in sufficient power to answer the early purposes of man's original condition, should be susceptible of improvement or degeneracy, commensurate with his intellectual progression. In the onward march of man, towards perfection, societies and individuals necessarily bear new relations to each other; and new subjects of property arise, which call forth the activity of the attributes, and increase their power, to meet the occasions which require them. Were it not for this expansive quality in them, it would be impossible to make any considerable advance in arts and civiliza-

tion, as only a few natural objects could be subjects of moral activity; such as domestic animals, and products of the soil. The whole field of the creative genius of man would thus be left a barren waste. The infinite wisdom which ordained a moral constitution in the only earthly being possessed of moral and intellectual attributes;—the only being having qualities indefinitely progressive towards perfection; the only being having the power of indefinite combination and alteration of the elements and substances of nature, to be appropriated to his own comfort and happiness;—we say, the infinite wisdom which could see all the future wants of such a being in the typical Adam and Eve, and abundantly provide for them by the expansibility of the attributes He originally bestowed upon their natures, has a powerful claim upon our consciences to compel our adoration for his infinite benevolence in anticipating all the wants of our progressive condition. As if a man, having an indefinite journey to perform, should find, at every stage of his progress, a rich and abundant provision for his benefit, provided by some benevolent being, more and more delightful and invigorating as he advanced.

No comparison between the different species of men is necessary in regard to this attribute. The original principle in each species, must have a strength in proportion to the strength of the other moral attributes, because it is the sanction of them: consequently as these vary, so must conscientiousness.

Intellectual appetite, which is our next subject in order, we have designated as a distinct human attri-

bute. It is a new word, which, for the want of a better, we beg leave to introduce to designate a principle of the human mind which has been hitherto entirely overlooked, or noticed only incidentally; but it is an elementary principle, or attribute of the mind, upon which much of its beauty and power is constructed, and without which men would remain stationary in knowledge. Rhetorical and critical writers have freely used the word Taste, to designate the faculty of the human mind to relish the beauties of nature and art; we use the word appetite to express that upon which taste is founded, and relish augmented; the hunger of the mind for intellectual food. There is certainly an intellectual desire for food in the human subject, very similar to the animal desire for food to sustain the body. It is manifested by very young children, whose minds are in constant search for something new and interesting. They no sooner commence to prattle than they exhibit as much intellectual, as bodily activity. Adults are often surprised at the pertinence, depth, and earnestness of their questions; and until they are taught by domestic discipline to the contrary, they are seldom satisfied with the commands of parents, without understanding the reasons for them. At the mature period of life intellectual hunger becomes sobered and chastened; but the necessity of a continual supply of food abides with man as long as his mind is in a sound and healthy condition. In some persons it becomes morbid and diseased; in others passive, callous, sluggish, or strenuous and energetic, according to the constitutional temperament of individuals, and the mode of instruction to which they have

been subjected. But, like the body, the intellect will starve without a supply of food for its nourishment; and, like it, too, if the food supplied should be weak, unwholesome, or too stimulating, the mind will be weak, unsound, or acquire the appetite for stimulating food. Nature supplies us, abundantly, with food, both for the mind and body; but it is by "the sweat of the face" that both are to be obtained. And when obtained, the manner of dressing and serving are important items to the relish and enjoyment.

Animals have nothing analogous to this intellectual appetite in their natures. Some degree of mind they may possess; but it is always subordinate to their instincts, which govern them, as reason governs man. But hunger and thirst for knowledge constitute no part of their natures. All of their desires, and all of their appetites, are abundantly gratified, and satisfied by their instincts, while in a state of nature; and although it may occasionally happen, that some unfortunate accident may place them under circumstances of trial and difficulty, in which reason would be useful to them, yet the occasions are so rare, that nature has made no provision for them. On such occasions they sometimes exhibit resources which, under similar circumstances, men could not improve, which we are apt to call the products of reason, because they resemble the perfection of our own intellectual powers. In a majority of instances, the expedients adopted by animals to overcome contingencies, may be classed with the highest examples of human ingenuity to accomplish similar objects. The great ingenuity displayed by

them, in some instances excelling the efforts of human reason, after the accumulated experience of thousands of years, shows clearly that they are not voluntary, thinking agents, but acting under a mysterious law, which we do not yet, and may never, fully understand.

It is not reason, however, which supplies the resources we so much admire, but pure instinct, which, in many instances, may be positively ascertained; and the few which we cannot trace to this principle we are justified in ascribing to it. There is an important difference between reason and instinct, which is generally lost sight of in our judgment of animal conduct. It is that when, under the same circumstances, all animals, of the same species, perform the same operations to overcome similar obstacles or contingencies, it is instinct which is the moving power. When the field spider secures a prey upon the ground, too large and heavy for her to carry to her web above her, she attaches a strong thread to one side of it, which she fastens firmly to an object some distance from, and above it. She then attaches another strong thread to the opposite side of the prey, when she ascends to a corresponding elevation on that side; being now ready, she pulls violently on the thread she holds, stretching the opposite thread to its utmost tension; and thus elevates the prey to a line nearly horizontal with her elevation. By repeating the operation, and cutting the first threads, after securing the elevation gained, the prey is ultimately brought to the desired position. Thus she accomplishes, by instinct, what she could not do by main strength. Such, and many other similar animal

contrivances, are often called reason. They are instincts; because all field spiders, of the same species, would, under the same circumstances, perform the operation in the same way. Ants, bees, and other insects, exhibit similar surprising resources; but all ants, bees, and other insects, of the same species, will always meet the same contingencies precisely by the same expedients: whereas reason, in different individuals of the same species, will very generally resort to different expedients to attain the same end, until experience teaches the best mode. Animals cannot be benefited by experience. man is the only being which can benefit by it; and he is the only being which varies from his fellow in the mode of overcoming difficulties. Uniformity in expedients is never expected among men, because reason is their only guide, and reason is different in every individual. Instinct therefore, differs from reason in the fact that it always directs the subjects of it, without previous instruction or experience, to the same mode of doing the same thing; whereas reason has always as many different modes, or expedients, to accomplish an objeet, as there are individuals to attempt it, until experience and instruction direct to a uniform mode of action. Animals, therefore, have no necessity for an intellectual appetite, as their instincts are perfect, and in harmony with their conditions and destinies.

Intellectual appetite is common to all mankind. No people can be so rude and barbarous as to be altogether without it; for some degree of it must belong to all people who have the power of speech and reason. But although all men possess it, they

may not have it in the same degree, nor of the same quality. In some it is feeble and gross; in others it is energetic and refined; and between them are several gradations. These differences arise chiefly from the difference of constitutional temperaments of the species of men; for although education and experience produce great alterations among men of the same species, yet we suppose it to be impossible to supply, by these means, what nature has denied by the constitution. Each species of men has a peculiar specific temperament differing from every other, which is exhibited by the anatomy, physiology, and above all by the history of each, as contrasted with every other. Beings which differ from each other in all of these particulars must necessarily differ materially in their mental constitutions, and therefore in their intellectual appetites, and their capability for improvement. As the energy and capability of the mind must be equivalent to the quality and capacity of the brain, and the sensibility of the nervous system to receive and transmit impressions, if these are modified, in any degree, the mind must suffer a corresponding modification. We repeat, if they are modified in any appreciable degree, the ultimate difference between the species thus variously modified, will be equal to all the differences now observed among the several species of men. If two straight lines be extended from the same point, diverging at any slight angle, the base of the angle will be long or short, according to its distance from the apex. If two men should start in life, as nearly equal as possible in regard to physical power and mental endowments, and should earn precisely the same sum

daily; and one should spend all he earns, and the other save sixpence per day and its accumulations, in a long life the one will be a pauper and the other an independent man. The same results would be apparent from any slight original differences in mental power. Such slight differences, followed by such important results, are not inconsistent with identity of species; but when the variation in amount is sufficient to constitute a difference of species, the disparity must be much greater. Consequently although two beings may have the same number and kind of senses, yet, if they differ in degree and intensity, the same objects, in all of its qualities and relations, will not appear, to both of them to be precisely the same. Two mirrors may be made of precisely the same materials; but they may be blurred, waved, or specked; plane, concave, or convex; and, if different in any of these respects, the same objects will not be seen in both of them in the same manner.

It will be remembered that the different species of men have temperaments indicative of their specific characters. The Shemitic species have the strenuous temperament; the Japhethic the passive; the Ishmaelitic the callous; and the Canaanitic the sluggish temperament.

If we are correct in having assigned to the respective species their proper specific temperaments, they indicate, at a glance, how very different the capabilities of the several species are for intellectual improvement, and the kind of mental food each would crave to satisfy the mental appetite. Among animals of the class mammalia, there are those that are

omnivorous. carnivorous, herbivorous, and insectivorous; and these animals are all different in their physical powers, in their anatomy and physiology, and in their manners and habits. But they do not differ more, in these respects than the different species of men vary in their intellectual powers, in their mental anatomy and physiology, (if we may so speak) in their intellectual manners and habits, and the kind of food they seek, and require, to satisfy their spiritual appetites. A slight acquaintance with the history of each species, will convince the reader that such are the facts in relation to the human family. Each species is actually pursuing a different course, in relation to moral and intellectual advancement, or remaining stationary, having pursued a different course. It is so now, always has been so, and will, probably, continue to be so, until He, who made it so, shall think proper to make an alteration. It is no answer to these facts to say that these astonishing differences arise chiefly from education and other influences; for the question falls back upon these very influences, and we ask how came all of them to act together exactly on each species, as a whole, distinguishing it from every other, as a whole? How does it happen now, that with the benefit of the example, guided by the benevolence, and, still more, the wonderful display of power acquired by knowledge, exhibited by the Shemitic species, no impression of any great extent, or importance, has yet been made on any other species to improve them?

But although there is, undoubtedly, a great difference in the natural appetite for intellectual food in

the different species of men, as to kind, quantity, and quality, established both by their constitutional organizations and their histories, yet it should not be inferred that any of the species are incapable of extensive improvements of their natural endowments, when they make efforts for that purpose. All men possess, radically, the same principles, or elements of intellectual power; and although there are evidently specific modifications of them, which have, to this day, prevented some of the species from improving them beyond certain limits, and have caused others to retrograde below the original standard, yet we know that all of the attributes may be highly improved by various means, the chief of which is exercise. It may be impossible for all of the species to advance in intellectual power as rapidly as those having the most favored constitutions; or to advance by the same paths which are travelled by species differently constituted; yet no doubt can be entertained of their ability constantly to advance, in some degree, and by some route, to intellectual power. Or, it may be, that those who are now the most degraded, may be destined, in the fulness of time, for some mental process, some new path to intellectual power and beauty, in harmony with their specific natures, and which may rival in usefulness and splendor the greatest achievements of those now so much in advance of them. Had it not been for the unbelief of the Jews, the Gentiles might not have been regenerated; had it not been for the overthrow of the Roman Empire, the world might yet be wallowing in the mythology and philosophy of Greece and Rome, or worse; had it not been for the Reformation, the consciences and learn-

ing of men might yet be stretched, or shortened, to fit the Procrustean bed of papal bigotry and policy; and who knows that some future revolution may not call forth the latent energies of all the species of men, when each will run, by his own specific road to the great intellectual goal, towards which the Shemites are hastening by such rapid strides?

Although we may suppose appetite to be an unimprovable attribute;—that is, that it cannot be preternaturally enlarged by exercise, without injury to the healthy functions of the mind,—yet taste, which is its offspring, admits of infinite cultivation. The appetite may be sufficiently craving to consume all the food with which it can be supplied, There is, by far, more danger that it may suffer for want, than that it should become plethoric or gouty, by abundance. But although a sound and healthy constitutional mental organization may not require an enlargement of intellectual appetite, yet all men have not such a constitution. There is, probably, as much difference in mental constitutions, in this respect, as in the physical constitutions of individuals in regard to carnal appetite. In some the digestive organs may be strong and healthy; in others weak and delicate; and in others unnaturally voracious. A judicious treatment, while it preserves the healthy in a sound state, may correct or remove diseases; and a cultivated taste must be advantageous to all conditions. It supplies the food in greater variety; it not only increases the relish by dressing, arranging, and compounding the materials, but it actually makes the whole more easily digestible and assimilable. By the cultivation of taste, therefore, the men-

tal constitution may become more robust and vigorous, and capable not only of enduring more hardships in its appropriate pursuits, but it becomes more energetic in prosecuting its designs.

As with the corporeal body, nitrogen, oxygen, hydrogen, carbon, phosphorus, lime, and iron, constitute essential elements for its growth,—so with the spiritual, or mental body, truth, beauty, utility, novelty, sublimity, and power, are essential elements for its nourishment and growth. But the body cannot be sustained by taking the elements in a simple state; they must be in a proper state of combination to afford nourishment. There is scarcely one of them which is not an active poison in a simple state. The reverse of this is the fact in regard to the mind. It requires everything to be as nearly elementary as possible; and when it receives anything not elementary, or suspected of not being so, it is surprising how many operations it will perform to analyze it, or to discover that it is a simple. More surprising still, when it lacks other food, and sometimes from choice, when it is otherwise abundantly supplied, it banquets on its own substance, to enjoy the relish of analyzing and digesting its own singular and mysterious properties. Many giants in the intellectual world have fed, and grown fat, upon metaphysical food.

Next to adoration there is none of the human attributes by which the different species of men are more strongly contrasted, than by intellectual appetite. The strenuous temperament of the Shemitic family is singularly exhibited by their constant craving for intellectual food, and by their strong powers

of digestion and assimilation. Nothing comes amiss to them. They feast as luxuriously upon the *infusoria* of a former world, as upon the nebular laws by which new worlds are in the process of formation. Nothing between the original molecule of matter, and the immense masses wheeling in infinite space, is too small or great for their appetites. Nay space and its contents will not always satisfy them; for they frequently grope in the regions of spirits, and the prey they cannot secure by corporeal means, they often ensnare by their spiritual power. The speculation of to-day becomes ascertained science to-morrow; and the moment it becomes fixed, it becomes a fulcrum for a lever to pry upon the world of science beyond it. The ancients made war to procure slaves to perform their labor; their descendants compel the matter of heat to perform duties beyond the power of animal labor. With their rich imaginations, they could only give to Jupiter a messenger with wings on his cap, his heels, and his wand; as a matter of fact, their posterity has seized, from the hand of their God, the emblem of his power, and made it the willing and instantaneous messenger for the ordinary, every day business of life. In short, things visible and invisible, corporeal and incorporeal, are alike compelled to furnish rich repasts to their intellectual appetites, and obedient servants to their physical wants.

Contrast these with the Ishmaelites, whose callous temperaments lead to very different results. Whether we regard the proud, haughty, austere, and abstemious Arab, or the flexible and polished Persian (the two extremes of Ishmaelite character), the same

callous indifference prevails for every thing not sensually exciting. Occasionally, under some of their Caliphs, or other peculiar circumstances, they have been excited, when they have exhibited some appetite for knowledge. Several of the liberal sciences they have been the first to serve up for the benefit of the Shemites, on the revival of learning; but in their disgusting and ostentatious manner of doing it, and their strong attachment to the marvellous, they showed that they had not the power to digest the food they furnished. The literature of the Ishmaelites has had its day of importance. When Europe was emerging from barbarism;—when the Eastern, or Greek Empire contained all that was left of civilization and literature, and Constantinople was surrounded by Ishmaelites;—when the successes and luxuries of the Caliphs had enervated their power, though they left them their pride and ostentation; when Bagdad and Cordova afforded the only safe retreat from the storms and violences which everywhere prevailed beyond the central seats of power;—it was natural that learning should concentrate where it could find the safest means of prosecuting its peaceful labors. It was thus that the works of Aristotle, Galen, Dioscorides, Euclid, Archimedes, Herodotus, Ptolemy, &c., became introduced to the Ishmaelites, and gave them an appetite for knowledge they could not digest. It was cast up upon Europe by such philosophers as Averroës, whose obscure, arrogant, and contradictory compositions exhibit far more pride than knowledge. It must be confessed, however, that their compositions were better suited to the unformed taste of the age,

than if they had been more delicate, and more labored. They dazzled, allured, and excited; and contained much important matter to form the rudiments of science. Notwithstanding the mixture of astrology with medicine and alchemy, they improved the *materia medica*, and laid the foundation for chemistry. Their histories are also of considerable value. Everything, however, came from them puffed up with the haughty pride and arrogance so peculiar to their temperament. The spirit of the Thousand and One Nights pervades every branch of their learning; and their literature, when it ceased to reflect the light of Greece and Rome, had no charm left, but the marvellous and romantic display of an oriental imagination. The barbarous and uncultivated condition of the Shemites during this period, gave to the Ishmaelites a reputation for learning, not beyond their deserts, when compared with the ignorance of Europe, but far beyond their deserts when compared with their advantages, and the slight benefit they derived from them; for they treated learning as they treated their conquered enemies,—not so much for the purpose of acquiring real, systematic, stable power, as to inflate their pride by ostentation. The reputation they then acquired still clings to them; not because they have since done any thing to deserve it, but by the gratuitous concessions of the Shemites, whose amiable benevolence is always anxious to hold up to admiration the labors of other species, which, if performed by members of their own family, would scarcely give them a reputation in the village in which they were performed. This amiable weakness has sought for,

seized upon, and magnified, the brightest examples afforded by all the dark races, and held them up as types of the species, to which, it is generously supposed, all may be advanced. If it were possible to elevate each species to the standard of a few selected examples, moderate as they are, we would cheerfully make every Negro an Ignatius Sancho, or a Gustavus Vasa, and every Negress a Phillis Wately; every Ishmaelite a Ferdosi, a Safi, a Hafiz, an Avicenna, or an Averroës; and every Japhethite a Confucius. But this is no more in our power, than it is in the power of those who have labored, in vain, to produce a conviction on the public mind, contrary to facts and history, that such a thing is possible.

The intellectual appetite of the Ishmaelites we have placed second in the list of the human species; but the step from the Shemites to them, is immensely greater than from them to the Japhethites. These two overlap each other in many particulars. The Ishmaelites have the advantage in all the higher branches of learning, as astronomy, the several branches of the mathematics, natural philosophy, chemistry, &c., as rudimental sciences; but in all practical matters the Japhethites are their superiors. With the rudiments of science the Ishmaelites have but little improved their moral and social conditions, or increased the products of industry; with scarcely any science, the Japhethites have brought their moral and social condition to a comparatively high state of perfection, and have increased the products of industry to a surprising degree. The constitutional temperaments of the species are strongly contrasted by these facts. The restless, roving, callous, but ex-

citable temperaments of the Ishmaelites, are opposed to the improvement of their domestic and social conditions by the greater rudimental knowledge they possess; whereas the quiet, orderly, and passive temperaments of the Japhethites dispose them to treasure up the fruits of practical knowledge, while it indisposes them to the labor of generalizing the principles thus acquired, for the purpose of building up sciences. The one has the rudiments of science, without much practical benefit; and the other has much practical knowledge, without science to aid it.

With the Chinese, who are the types of this species, learning is the sole road to distinction and power. But learning with them is a prescribed routine of study, relating to their history, statistics, and their laws, civil, criminal, and sumptuary; all of which form parts of their state machinery, and are remarkably voluminous, precise, and minutely particular in details. Their vocal language is monosyllabic, poor, and barren; while their written language, arrested between the hieroglyphic and alphabetic, represents an idea by every letter or character. Consequently, their prescribed studies are sufficient to occupy a life. Literature, like religion, languishes and becomes corrupt, when made part of state machinery. Thus although they are emphatically utilitarians, they are as emphatically destitute of science, as they are successful in the results of labor. Isolated facts they possess, in sufficient abundance to form the rudiments of every science; but they all remain as if they had been dropped among them, without classification or investigation. Passive, systematic, orderly, and eminently practical, they have no ima-

gination with which to form speculations, or theories, and are, therefore, incapable of forming sciences. In short, their intellectual appetite for food is feeble, satisfied without variety, and has no desire or relish for elementary food. Rich in materials, they have remained, for thousands of years, passively stationary in mental development.

We have seen that the descent from the Shemites to the Ishmaelites was by a wide step; and that from these to the Japhethites the distance is very trifling; but from these to the Canaanites the step is again wide. There is not a single circumstance in the history of the whole of this race which indicates an intellectual appetite beyond an embryotic state. It is not enough to say that they are entirely destitute of the arts and sciences, strictly speaking; for they are destitute of all the means necessary for acquiring the most common rudiments of knowledge. They have not only no alphabet, but have not yet made the first step towards acquiring it. No people of any other species, have yet been discovered, so low in intellectual development as not to possess some mode of communicating ideas to others, otherwise than by the voice; but we do not now recollect a single nation of Canaanites which has any paintings, hieroglyphics, or symbols of any kind, by which to communicate ideas. Some Mohammedan Negroes, bordering on the Sahaara, have received some cultivation from the Moors, together with their religion, but we speak of cultivation by their own unaided efforts.

In our estimate of the appetites of the different species, we have indulged in no speculations, in re-

gard to what improvement may be made of this attribute by cultivation. We have taken the species as we find them. That they are all susceptible of improvement, cannot, for a moment, be doubted; but whether any of the dark races would advance much beyond their present conditions, uninfluenced by the precepts and examples of the Shemites, is a question which, judging from the past, and from their temperaments and sexual relations, may be promptly answered in the negative. That these dark races were destined by the Almighty to their present conditions, as the utmost limits of their several developments, cannot be supposed. Indeed we know it to be otherwise; because improvements of individuals of every species have taken place, when they have been placed under favorable circumstances. The Shemites, therefore, being the only species progressively developing, appear to be appointed to the high and important duty of instructing the world. The authority, and the power, are committed into their hands; and whether they use moral suasion, or the rod, they are responsible to their Master and Employer, for the manner in which they discharge the arduous, responsible, and immensely important trust. Britain is now Provost of this world-university. We admire her discipline and regulations, as a whole. She may use the rod more than is necessary, and certainly more than we think consistent with humanity, in the East; but we are not placed exactly in the right position to judge accurately, and are very apt to be governed more by our feelings than our minds, when we sit in judgment on others, with only a partial view of the

whole case. When we look at her great end, which, if she has it not in view, she is nevertheless accomplishing, as certainly as if she designed it, we can scarcely think the coercion greater than what is necessary: and surely America should regard her with a lenient eye, as well because she is our mother, as from the more important fact, that we are as certainly destined to succeed her in her high office, and that at no very distant day, as that a child will succeed to the inheritance of a parent. Her severity may be a necessary preparation for the more mild instruction of her successor.

Prudence, the next attribute in our list, is generally thought to be a quality resulting from other attributes, rather than a distinct trait of human character. Whoever has paid a close attention to men, must have discovered that this great feature of the human mind, although always accompanied by sound sense, is not necessarily possessed by men in proportion to their other intellectual powers. Nay, we think it will be found more generally true, that men extraordinarily developed in other attributes, are less frequently endowed with this apparently humble, but most important feature of human excellence. It may be the result of a well balanced mind, in which all the original attributes bear a just and harmonious proportion to each other. But may it not also be the cause why this harmony of parts exists? Do we not often see harmony of parts without, as well as with, prudence? Others may suppose that prudence depends on the constitutional temperament, as well as the spiritual attributes; and, therefore, the combined result of the whole being. If so, then this

beautiful and rare physical and psychical harmony, is as well entitled to assume the dignity of a distinct attribute, as any others; for they are all the result of this same mysterious union of body and spirit. We can have no idea of any mental power not derived from this union.

Phrenologists embrace this attribute in their organ of cautiousness; but, if we mistake not, prudence is too large a principle to be enclosed within the narrow limits of caution, unless a constructive latitude be given to it, which neither common usage, nor its derivation, will justify. Caution always implies timidity or fear; prudence neither. Caution is opposed to action; prudence weighs, and guards against contingencies. Caution has regard to personal safety; prudence to the end proposed, and the circumstances relating to it. Caution is indecisive; prudence eminently decisive. Caution is often opposed to the clearest dictates of the mind; prudence enters into the counsel without fear, favor, or affection, and abides by the result of the joint labor. Firmness becomes obstinacy, courage temerity, generosity prodigality, and religion fanaticism, without prudence; but all these things are resolved into selfishness by caution. This last is a principle inherent in animals as well as men; but prudence is an attribute inherent only in the human family. It is never applied to animals, except by a rich fancy, and benevolent imagination, which can discover any and every human attribute in beasts of the field, and birds of the air.

Although prudence is always an evidence of a well balanced mind, yet we believe it to be as much

the result of the peculiar temperament of the individual, or species, as it is of the mental and moral attributes. Buonaparte's intellectual powers were probably of a higher order than Washington's; if he had had equal prudence he would not have died on a rock, the wonder and fear of mankind. Franklin was eminently a prudent man; but his powers of mind were, probably, inferior to Hamilton or Burr; the first of whom has left a name less endeared to, and the last a name detested by, the American people. In our common intercourse of life, we frequently meet with individuals having great prudence, who are not distinguished for any high degree of moral or intellectual endowments. It appears to require a plain and unpretending, but steady and firm, rather than a brilliant and showy, but wavering and unsettled, intellect.

Of all the dark races the Japhethites possess this valuable attribute in the highest degree. It belongs more appropriately to the passive, than to the callous, or sluggish temperaments. It is, probably, the chief cause of their equality with, if not superiority over, the Ishmaelites. Indeed, we know not that they do not possess it more generally diffused among the mass of the people, than it is among the mass of the Shemites. There are many individuals among the Shemites, who exhibit this admirable attribute more fully than it is at any time exhibited by any Japhethite; but this may arise from the fact, that, by reason of a greater advance in civilization, and intellectual power, the Shemites are more frequently placed in conspicuous positions to exhibit it to the gaze of mankind. But we apprehend, the Chinese, as a peo-

ple, would favorably compare in this respect with the people of any nation among the Shemites.

The callous temperament of the Ishmaelites is unfavorable to any high display of this attribute. Revenge, selfishness, wantonness, and voluptuousness, are their principal incentives to action. Cruelty, robbery, destructiveness, and jealousy, are the consequences which follow such principles. Prudence is seldom present in such councils. But although, in general, they are not distinguished for this virtue, we must give them credit for a larger endowment of it than belongs to the Canaanites, who are almost destitute of it. Reckless, careless, and proverbially improvident, they seldom exhibit prudence in their conduct. Even after having lived centuries with white people, from whom they have received every possible instruction for the purpose of developing an attribute which would be so serviceable to them, as well as those whom they serve, it is very far from being a virtue for which they are distinguished, or even trusted.

Admiration is the next attribute in order. We use the word in its strict and literal sense, signifying to look at attentively and earnestly, with desire, esteem, pleasure, or love. In this sense it is wholly distinct from surprise, amazement, wonder, and astonishment, all of which are animal, as well as human properties. All of these express different degrees of the same influence upon all animals, because they operate by suspending, or overpowering the mind of man, and the instinct of animals. But admiration, while it fills the mind with the beauty, utility, or greatness of an object, leaves the mind

free to perceive excellences, and to love and esteem them. The affections always form a necessary ingredient of admiration; but they never constitute a part of surprise, amazement, wonder, or astonishment. No man admires what he does not love, esteem, or desire; but who loves, esteems, or desires, that which startles him by surprise, bewilders him by wonder, overpowers him with astonishment, or involves him in perplexity and confusion by amazement? Curiosity or incitement prompts admiration, and we are attracted towards the object by a powerful interest, or desire to possess, or imitate it; but surprise, amazement, wonder, and astonishment, suppress curiosity, and repel or make us fly from the object, or extricate ourselves from the maze in which we are involved.

Phrenologists have an organ for wonder, in which they include admiration; as if the first were the genus, and the last the species. But wonder is an animal property or quality incident to animal preservation; whereas admiration is exclusively a human property, belonging to the mind, and prompting to excellence. It is confessed they bear a relation to each other; but not more than instinct bears to reason. It is also confessed that admiration always implies a degree of interest in the beholder, upon perceiving some beauty or quality, unexpectedly new or great; but it never amounts to surprise, amazement, wonder, or astonishment, which suspend and stupify but do not enliven or interest.

That admiration is of a mixed nature, requiring the exercise of reason to perceive the admired qualities, and some degree of affection for them is no

reason why it should not be esteemed a distinct attribute. All of the attributes are of a mixed nature. Adoration requires reason for its exercise; and reason requires aid from all of the senses. No attribute stands isolated in the human mind; but each is so intimately related to, and influenced by others, that it is next to impossible to define their precise boundaries. It is so throughout nature; for "the close connexions and nice dependencies" of one thing upon another, link the whole of God's creation into one whole.

Admiration, in the sense we have explained it, is in some degree common to all men. Without it, we conceive it would be utterly impossible that any the slightest advance should be made in mental improvement, because it is the great incentive to human exertions in all branches of human improvement, beyond the mere business of sustaining life. If man had no admiration for great men, actions, or mental qualifications, he would be at no trouble to acquire the means to imitate the one, or acquire mental power. As a quality of the mind therefore to incite to great performances, by the force of the esteem, love, or respect entertained for others, it is exclusively a human attribute, in which no animal partakes.

But although all the species of men possess this attribute, they do not possess it in the same degree. There is a strongly marked difference between the several species in this respect. The strenuous temperament of the Shemitic species, is particularly distinguished by a high admiration for every kind of mental development. The activity, perseverance, and fearlessness, with which they pay court to

knowledge, is a matter of astonishment even to themselves. No climates, deserts, beasts, or savages deter them, and this not so much for the love of gain or fame, as the pure admiration of science. It is also a decidedly more chaste principle in this than any other species, in its nature and objects. Whatever knowledge the early Greeks received from Asia or Africa, was immediately chastened and adorned by them. Besides it is evident that when they became acquainted with the useful or beautiful known to the Asiatics or Egyptians, they also became acquainted with the barbarous and disgusting, yet, to a very great extent, they adopted, improved, and embellished the one, and rejected the other. The same results are apparent in the northern barbarians who overran the Roman Empire. Compare them with the Ishmaelites who overturned the eastern empire, and mark the different results which followed their conquests.

The callous temperament is manifested in a remarkable degree by the Ishmaelites, in regard to this attribute. Admiration with them is counted a weakness. Indeed the most of them pride themselves on possessing so much indifference as to be insensible to wonder, surprise, or astonishment, and much less are they moved by admiration. A gravity too austere to be easily moved; a temper seldom taken by surprise; and a coolness indifferent to effects, or causes, are among their most prominent characteristics. These traits are universally exhibited among this species of men, whether they inhabit Africa, Asia, Europe, or America. The American savages display them more glaringly than any other tribe or nation of the

species; but they are also characteristic of the inhabitants of Zahara, of Egypt, Turkey, Arabia, and the whole of Central Asia. Consequently they cannot be attributed to any other than a natural cause, because they act uniformly upon all nations of the same species, however remote from each other, and under whatever circumstances they may be placed.

The passive temperament of the Japhethites is also strongly marked by a deficency of admiration. The excessive vanity and self-sufficiency of this species, produce a result very similar to that which is produced by the haughty pride and austerity of the Ishmaelites. The Japanese, from what we know of them, appear to be a highly favorable variety of this species of men. It is said they have much more energy of character, and much more of an inquiring spirit than the Chinese; but we know too little of them to be enabled to decide, with any certainty, in what particulars, and to what extent, they vary from their type, the Chinese. The first visitors of a country are not generally those whose narratives of the manners, habits, customs, and laws of a strange people are to be relied on, even if they are men of undoubted veracity. A disposition to magnify the strange and marvellous, and to neglect nicely distinguishing traits of character, in respect to a distant and singular people, is more common to men than the best are willing to admit, or able at all times to guard against. Indeed while everything is new and strange to the beholder, it is very difficult to go deeper than a surface or outside examination.

The sluggish temperament of the Canaanites forms another modification of admiration. Objects which

excite this feeling in them must be chiefly those of sense. Loud and boisterous mirth, brilliant colors, violent and capricious exercise, are especially exciting to them. Gloomy and parched as is their soil; —desolating, enslaving and cruel as are their wars; —dangerous, fatiguing and exhausting as are their journeys;—scanty as is their food;—sulky as are their tempers;—and barren and blank as are their intellects;—yet the Almighty has given to them a levity of spirits, capable of being roused by some rude and clamorous instrument of noise, which immediately elevates them above all privations, dangers, and depressions, and gives to them a boisterous mirth, an outbreak of jollity, which no other species can rival. With this childlike disposition for mirth, they unite an equally childlike simplicity of admiration. Trinkets, toys, and fantastic or gay clothing, are treasures to them. Nor do they examine them with the stern gravity of an Ishmaelite, or the courteous indifference of a Japhethite; but with hearts too full of pleasure to be smothered up, and too clamorous to be restrained within the formal limits of courtesy or indifference.

There is, probably, no human being so low in the world, whether civilized or savage, if in the enjoyment of his natural endowments, who is not, in some way, influenced by the desire of distinction. No matter how narrow, or how wide may be the circle of his influence, his desire for distinction fills the whole space, and more frequently aims at extending beyond, than it is satisfied by falling short of it. It quickens the boon companion at the ale-house, as well as the courtier in a palace; the pedagogue

with his birch, as well as the king with his sceptre; the savage who is foremost in the chase, as well as Buonaparte at the head of an army. The poetry of every people, from the Iliad to the savage death song, indicate fame as one of the natural attributes of man. The early history of all nations is rendered dark and fabulous by the activity of this principle in their great men to become gods, or in the desire of the people to deify and perpetuate the virtues, actions, and acquirements they admire. All hero worship arose from this cause. The desire for fame, therefore, occupies all human breasts in a greater or less degree. It is an innate principle, a part of that "longing after immortality" for which the soul yearns, as well in regard to this, as a future world. It was evidently as active a principle before there were pens to record events, as it has been since the art of printing has furnished a more imperishable means for perpetuating names and events, than towers, pyramids, and mausoleums.

Phrenologists have located an organ, which they have named "love of approbation," which, they say, is common to men and animals. In a very restricted sense a very few animals appear to be sensible of approbation; as the dog, the horse, and the elephant. But it is by no means sufficiently general among them to entitle them to rank with man, and to share with him in intellectual properties. The ox, the sheep, the hog, the goat, and the cat have no claim to it. But they make it a generic term, including fame as a species, evidently stretching a minor to a major term, for the purpose of giving to phrenology a universal application. Fame is, however, the generic

term, including renown, and all other terms by which a name becomes public property. All other words restrain the sense, in some respects, from the broad and extensive sense implied by fame. It has no reference to good or evil conduct; for Zingis and Tamerlane have a fame as extensive, though not as imperishable, as Alfred the Great and Washington. Nor has it exclusively a reference to an extensive reputation; for a quack physician may be as famous in his neighborhood, as a king in his nation. Nor has it any reference to any particular station in life; for it often happens that mere intellectual powers confer a more durable, lofty, and dignified fame, than is enjoyed by kings and generals. Homer, Demosthenes, Aristotle, Cicero, Virgil, Linneus, Bacon, and Newton, have greener and more refreshing fames, than the kings and generals, their contemporaries. Renown is the next most comprehensive word implying general public reputation. It may be as extensive as fame, but it is confined to great exploits, which the other is not. We speak of renowned generals, who may be also famous diplomatists. We may with equal propriety say that a general is as famous in the field as in the cabinet. Reputation is the next word in the descending scale, implying a public name. It forms a component of both of the preceding, but is more restricted in extent of enjoyment, or of prominent qualities. Lawyers, physicians, authors, &c., may enjoy good reputations, whose talents or acquirements may not be sufficient to entitle them to posthumous fame. Where, now, shall we find a place for the "love of approbation" of phrenologists? Mere approbation, the approval

of an inferior by a superior, of an employé by an employer, can have no place in the love of fame, an ardent desire for a prominent and imperishable name among men.

In the progressive improvement of society the objects of fame change, because they take their characters from what men most value. There are, however, certain natural principles which are universally regarded as objects of fame; such as courage, magnanimity, fortitude, intellectual power, &c. But these undergo many modifications by improvement in civilization. It has generally been supposed that war and hunting were the first occupations of men in the primitive ages; and of course that the objects of fame were to excel in these pursuits. We think otherwise; for we cannot conceive it to be possible that men could emerge from barbarity whose employments were necessarily so active, exciting, precarious, and destructive, as these pursuits necessarily imply. There is not an instance in history to warrant the belief that these pursuits were ever followed by civilization, by the operation of causes in themselves. It is a strong proof of the inspiration of the Mosaic record, that it represents the original state of man, and his state after the flood, precisely such as it should have been to produce civilization. Agriculture was the occupation of Adam's and Noah's families; and, without this pursuit, we think it would be impossible for any man to show, from history, or sound argument, any mode by which men could arrive at any degree of civilization, or any probability that it could arise from such a condition of things as war and hunting.

Civilians have adopted the opinion as an axiom, that the wants and fears of men first induced association; which, if it is true, is opposed to the notion that the chase was the original employment of men. Such a means of livelihood necessarily demands a sparse population. The wants of men, if they must be supplied by the chase, would become difficult to be supplied in proportion to the numbers of the community. The fewer the better under such circumstances. The fears of men, as it regards wild animals, or any other thing but their fellow men, are rather creatures of civilization than realities of savage life. A citizen, turned into a wilderness, might turn grey with fear at that which would only be a gentle lullaby to the couch of a daring hunter. Men seldom fear the things to which they are accustomed, however appalling they may be to others. To talk of fear to one of our pioneers on the frontiers (except that of being crowded for elbow room when settlers approach within ten or twenty miles of him), would be talking of what he could not comprehend, as such an idea never entered his mind. To tell him that his wants and fears would compel him to enter into society with other hunters, for his support and protection, would be wholly unintelligible. He would point to the woods for his support, and to his arms for his defence, and tell you he never failed in the one, nor feared for the other.

The wants and fears of an agricultural population keep them together, for they have something to lose by predatory war, and something to gain by association. The first objects of ambition, therefore, were probably of an agricultural nature, such as flocks, herds,

plantations, and the arts necessary to prosecute the business. Thus we see the reason why, in the mythology of every ancient nation, the sun, moon, stars, and the earth, as causes and means of production, have, in general, older dates assigned to them, than gods of war, or of the chase. *Cœlus et Terra* were the progenitors of all pagan gods. So also Vulcan, supposed to be Tubal Cain, Ceres and Pan, or other similar deities, were objects of the most ancient worship. In the process of time, as flocks, herds, and productions multiplied, the incursions and depredations of ferocious beasts compelled some to seek and destroy them, for the security of their property. Courage and expertness, in the destruction of such depredators, became objects of fame, and men became deified by their prowess against them. In process of time, also, some men by reason of their crimes, and others from inclination, fled to the woods for security or pleasure, who made irruptions upon the agriculturists "to take a prey and take a spoil," and defence became necessary. But merely defending possessions would soon be found not to be the best method for security. Hence offensive wars to recover stolen property, or to drive away troublesome neighbors; and thus conduct in war became an object of fame.

We have already remarked that the objects of fame would change as society developed. But it is remarkable that with the very earliest dawn of civilization, in every nation of the Shemitic species, intellect was twin born with heroism, and they became simultaneous objects of fame. Prowess may be the elder; but genius, to celebrate the rude virtues,

strength and courage of heroes, followed so closely that they were both rocked in the same cradle. Mind, therefore, was the earliest and most important associate of heroism. It gave body and soul, for it gave fame to heroic exploits, and fired heroes with enthusiasm. Epic poetry is associated with the earliest history of every Shemitic people. From the Iliad of Homer, the Edda of Scandinavia, the bards of Germany, Ossian, down to the late bards of highland Scotland,—nations, nobles, and heroes received their fame in song, and honored the genius of the historians. Without them they would not have been the people they were. Thus intellect rivalled, and soon surpassed physical powers, as an object of fame. We find poets, historians, and philosophers, contending at the olympic games for fame, with better success than wrestlers, boxers, charioteers and gladiators. As civilization advanced, intellect became more and more attractive. It was discovered that Homer had a brighter and more durable fame than Hector and Achilles, to whom he gave an immortality their deeds alone could not achieve for them; that Aristotle had a more permanent and extensive empire than Alexander left to his generals; that a man of genius could achieve more in his closet to revolutionize mankind,—to improve mind, morals, religion, and government,—than kings on their thrones, or generals in the field. When potentates became fully sensible of this truth they endeavored to seize upon, and enslave intellect, to make it serve their own ends. For a time they succeeded, and among some Shemitic nations they yet hold it in bondage; but it has burst its fetters in some places, and loosen-

ed them in all. In the greatest, because it is the freest monarchy in the world, we now behold the sublime spectacle of a whole nation presenting to a private and humble individual, the tribute of grateful hearts, and more than a crown of laurels, for a victory over the conqueror of Buonaparte, at the head of the whole aristocracy of the nation, in a matter of deep interest to the people at large.

The superiority of mind over mere physical power, is not only becoming daily more and more manifest, but, as a consequence, the possessors of great intellectual powers become more permanently famous than kings or generals. Buonaparte has acquired a conspicuous place upon the page of history, as a conqueror, which will be probably made more conspicuous, because he will be the last general among the Shemites, and probably in the world, who will have it in his power to aim at the barbarous *ignis fatuus* of universal empire: and yet who would not rather have the bright, serene, and increasing fame of Newton, Cuvier, Humboldt, and dozens of others, than the lurid, fiery, and scorching fame of the Corsican? And yet he was a necessary evil of the times, to prepare the world for the great revolution now in progress, and which he predicted.

Thus we see that intellectual power was associated with heroism, as an object of fame, among the Shemites, from their first separation from their brethren to follow their destinies as a distinct people. Not so, however, with the other species.

The Arabians had no literature deserving the name,—at least none that they have preserved, and,

therefore, we conclude, none worth preserving, prior to the sixth century of our era; consequently, intellectual power did not become, with them, an object of fame, until after Mohammet had prescribed its limits in the Alkoran.

It must be presumed that the Arabians had made considerable progress in literature, prior to the appearance of the series of poems called the Mooalakat, i. e., "the Suspended;" because they are written with the grammatical accuracy only to be acquired by frequent and long practice. These poems belong to the sixth and seventh century of our era, prior to which time, nothing of importance has been preserved. This is surprising; because the mode of life of a pastoral, hunting, and predatory people, inhabiting a country of deserts and oases,—of floods and drowths,—of high mountains and sandy plains,—of burning and brazen skies and terrific storms;—would naturally produce poets. It did produce them of the very highest order among the Shemites of the old Testament. The Book of Job, the oldest and most sublime poem in existence, is entirely made up from Arabian scenery and knowledge.

But the genius, or rather temperament of the Ishmaelites was not favorable for the production of any high and influential order of poetry. Poets they undoubtedly had; but they were poets of a family, or small tribe, callous to the beauty and sublimity of nature, and only excited by the hope of plunder, or the gratification of their pride, or passion. They were, probably, of the same oriental and bombastic style and thought which now pervade their poetry, tales, and histories, and contained nothing of a na-

tional nor intellectual character, worth preserving. It is a remarkable fact, exemplified in every species of men, and in none more than the Ishmaelites, that whatever improvements may be made in the grammatical construction of a language; however rich in words a species may become; whatever progress may be made in civilization, in manners, habits, customs, or religion, the same peculiar and distinctive mode of thought and style of composition, observable in their earliest intellectual productions, accompany them throughout all succeeding ages. The same deep and sober thought; the same general regard for truth and impartiality; the same regular and connected mode of relation; the same rich, but chaste imagination, may be traced throughout every Shemitic nation, from Homer and Herodotus, through all the varying circumstances of thousands of years, down to Scott, D'Aubigné, and Prescott. How strongly do the Ishmaelites contrast with the Shemites! The same general want of thought, and abundance of pride; the same fondness for embellishment, hyperbole, and fable; the same disregard for truth and impartiality; the same want of connexion in their histories, and isolation in their tales; may be traced through them from their earliest, to their latest history. These differences cannot be accounted for by the influence of education, or of imitation; for they are equally apparent in the Scalds of Scandinavia, and the bards of the Germans and Celts, as in Homer and other Greek and Roman authors. They are also equally manifested by the old Persian, as the Arabian literature. They can only be rationally ac-

counted for by the difference of temperaments, constituting difference of genius.

Persian literature can boast of nothing more ancient than Arabian. The admirers of Persian literature contend, that, by the conquest of Persia by the Caliph Omar, the literature of this country was destroyed, in the same manner, and for the same reason, that this ignorant bigot destroyed the Alexandrian library. The same wholesale destruction, however, did not take place; for the Generals employed in Persia, only destroyed the religious works of the Magi, as the Greeks had done before them; but their histories, and other general literature, not relating to religion, although they may have suffered partially, were not objects of persecution. The celebrated poem of Ferdousi, called the "Shah Namé," or "Book of Kings," was composed under Mahmoud, in the eleventh century of our era, and of course long after the Mohammedan invasion; and the facts were obtained from Persian histories, which were then, as probably they are now, extant. The work of Ferdousi is only better known because it has merit to recommend it. "The epic poet, Ferdousi," says Richardson, in his "Dissertation on the Languages, &c., of Eastern Nations," pp. 24, 25, "In his romantic history of the Persian kings and heroes, displays an imagination and smoothness of numbers hardly inferior to Homer. The whole fanciful range of Persian enchantment he has interwoven in his poems, which abound with the noblest efforts of genius; and he has stamped a dignity on the monsters and fabling of the East, equal to that which the prince of epic poetry has given to the mythology of an-

cient Greece." From the high praises bestowed upon this very celebrated poem, it must be so very different from any literary production preceding or succeeding it by any Ishmaelite, that we are inclined to believe Ferdousi to have been a descendant of a Greek, or at least versed in Grecian literature. We know that from the conquest of Persia by the Greeks, until long after the Mohammedan conquest, the Greek language was sedulously studied both in Persia and Arabia; and that many of the Mohammedan Caliphs encouraged translations of Grecian authors. Accounts were kept in the Greek tongue, and even the coins of the Caliphs had Greek inscriptions. Arabian, and we have no doubt Persian, literature acquired a temporary and factitious impulse from this cause, which has not been maintained; and it is highly probable that the Shah Namé was the bright flicker of the flame before it became extinguished. Be this as it may, it stands alone in the history of Ishmaelitic literature; and, excepting what may be gathered from Greek authors, contains nearly all that is known of the ancient history of Persia.

Excepting the works of Ferdousi and Hafiz, the Anacreon of the East, and a few authors of less note, Persia can boast of nothing deserving the name of literature. History, if their romances can be called by the name, they have had from a very early period; but it is remarkably loose, defective, and unsatisfactory. The only early authentic history of Persia, from the 7th century before Christ, to the Sassanian dynasty in the third century of our era, must be gathered chiefly from Greek authors. They had no poets to celebrate the exploits of their heroes, and no his-

torians to set forth the splendid facts recorded of them by the Greeks. Even Cyrus the Great was unknown to them; nor have they any "King of Persia, who, in the events of his reign, can be apparently forced into a similitude" with him, says Mr. Richardson, in Dissertation, p. 42. From the reign of Cyaxares (about 610 B. C.) to the Macedonian conquest, we have "the history of the Persians as given us by the Greeks," he says on the same page, "and the history of the Persians as written by themselves. Between these classes of writers we might naturally expect some difference of facts; but we should as naturally look for a few great lines, which might mark some similarity of story: yet, from every research which I have had an opportunity to make, there seems to be nearly as much resemblance between the annals of England and Japan, as between the European and Asiatic relations of the same empire."

From the Sassanian dynasty, down to the conquest of Persia by the Mohammedans, in the seventh century of our era, we are compelled chiefly to rely on Persian authors for their history, defective, bombastic, and hyperbolical as it is acknowledged to be. Of these historians Mr. Gibbon remarks,—"So little has been preserved of Eastern history before Mohammed, that the modern Persians are totally ignorant of the victory of *Sapor*, an event so glorious to their nation."

This victory of Sapor, king of Persia, over the Romans, happened in the year 260 of the Christian era, when Valerian, the Roman emperor, was taken and flayed alive.

When we remember that Persia, long before the Macedonian conquest, from the conquest of Lydia by Cyrus the Great, had had an intercourse with the Greeks, and must have been improved by their literature and intercourse; and that, as we have remarked, after the conquest by Alexander, during the reigns of the Seleucidæ, they were under the direct influence of Grecian manners and literature, we are more surprised that they have preserved their inflated style, and barrenness of thought, than that they should produce only one Ferdousi.

It is customary to give credit to the Arabians for the introduction of many of the rudiments of science to Europe, upon the revival of learning during the dark ages, as if they were actually the discoverers of the principles they introduced. We were undoubtedly indebted to them for astrology, alchemy, something in the healing art, something in the science of figures, and the veneration for Aristotle, which produced gladiatorial disputants in our schools and colleges; but if it had not been for the native energy of the Shemitic temperament, we should now be, in all the sciences, where their callous, and consequently haughty temperaments have kept them from that time to this, if they have not receded. We think it fair to infer, from their history, both before and since the birth of Mohammed, that they have given very little to Europe which Europe had not given to them before. Bagdad, built by Almansor, became, early in the 8th century of our era, the resort of the learned of the world. The wealth and power of the khalifs, masters of almost the whole civilized world, enabled them to protect and reward

with a liberal hand, genius and talents of any kind which could contribute to their fame, and swell the pomp of their courts. Greek physicians were particularly in request at Bagdad. Upon the decline of the solid power, though not of the pomp and outward respect of the khalifs, a rivalship sprang up among the many Ishmaelitic princes who usurped the government of provinces; "every Sultan considering it as an object of first consequence," says Richardson, p. 25, "to number among his friends, the most celebrated poets or philosophers of their age. No expense was therefore spared to allure them to their courts; and no respect was wanting to fix a continuance of their attachment." But it does not appear that this rivalship proceeded from any real desire to advance learning, but only as part of the pageantry of the several courts, by which the several princes endeavored to excel each other. Learned men were splendid prisoners at court, and were not permitted to retire from it. If they escaped they were sent after and imprisoned; and if they sought the protection of any other prince they were demanded, and often yielded up, if the prince demanding had the power to enforce his demand.

Thus we see that the Ishmaelites had no intellectual object of fame until very recently; and that even up to this time, it is comparatively of very little importance among them.

The Japhethites had a literature at a very early period. Previous to the age of Confucius, however, their history is involved in fable, and presents nothing to attract our attention, except what is narrated by him. He is more emphatically their great model

and the father of their literature, than Homer is of the Shemites, or Ferdousi of the Ishmaelites; for he is at the same time their god, their legislator, their philosopher, their historian, and their poet. He lived about five hundred and fifty years before the Christian era.

Confucius wrote five books, which are called the Five Canonical Books; to which are added four books by his disciples; which together form the sacred and classical works of the Chinese. Before, and for two or three centuries after his death, the present Chinese territory was divided into several distinct kingdoms, which, however, owed a nominal allegiance to one superior lord, or emperor: and, it is said, that wars then prevailed among the different states as frequently as among other people. Probably similar to the feuds of the Barons of Europe, during the middle ages. At the time he commenced to promulgate his doctrines, peace universally prevailed among them, so that he encountered no difficulties in his journeys from one kingdom to another, to teach his doctrines to princes and people.

The works of Confucius and his disciples are prodigies, considering the time when they were written. If it were really true, which appears to be the opinion of many writers, that China, before his labor, was a kind of heptarchy of savage barbarians, as ferocious and destructive as any of the Tartar hordes, with like passions, manners, and habits;—and that Chinese government, manners, and industry were produced by his labors, it would certainly be the most surprising circumstance in the whole natural history of man. In all of our researches hitherto,

we have found that the natural temperament, genius, or disposition of every people was the foundation upon which their social structures were built. That the superstructure must conform to this foundation, however high it may be raised, or whatever embellishments it may receive from human art. Here, however, it is pretended, that Confucius actually laid the foundation, or rather actually tore up and destroyed the old foundation, and built a new one, converting a people of a sanguinary, ferocious, and barbarous temperament, into a peaceful, industrious, orderly, and passive people;—converted them from a rude and quarrelsome people, into a nation of polished mannerists, holding their tempers in perfect subjection. It has also been supposed that he was the originator of the philosophy and morality he teaches. Supposing these things to be true, we hesitate not to say that he is eminently worthy of the adoration of more than four hundred millions of human beings, and the highest admiration of the rest of mankind. The world has never produced his equal as a legislator, a philosopher, and a poet. If these things are true we hesitate not to say that he was more than man,—some supernatural being, and more than he knew himself, or his contemporaries supposed him to be;—some being specially commissioned to perform these great miracles in the world. There are several important blunders in his system which exhibit its earthly origin. But no matter; the man who could devise a code of laws to mould into a homogeneous national mass, several nations of people so heterogeneous that they could not live quietly by the side of

each other; to subdue their turbulent passions, and make them polite and courteous; instead of contentious and supercilious; to make them industrious and frugal, instead of predatory and wasteful; and could do all this without temporal power or authority, by the mere force of example and persuasion, must have possessed a power never possessed by any other human creature. Even our Savior, who undoubtedly possessed the power, never thought proper to exercise it on a more extensive scale than miraculously to change the tempers and hearts of individuals; as in the case of Matthew, to whom he said "Follow me. And he arose and followed him." But the admirers of Confucius have attributed to him millions of such miracles, for the nations then composing the now Chinese Empire, at his word, "arose and followed him."

It is not necessary for the just fame of this truly great man to invest him with any supernatural power. He does not claim it, nor do his history and that of his people make it necessary to ascribe it to him. His great merit, and it is enough to entitle him to rank with the greatest men of antiquity, consisted in recalling the people to the condition suited to their natures, by informing them of the customs and laws of their ancestors, and detailing the state of happiness and prosperity they enjoyed under Yaou, Shun, and Yu the Great; and, contrasting the evils they were then suffering with the former happiness, to exhibit the misery experienced by having departed from their maxims and regulations. Confucius, therefore, had only to collect the histories, maxims, government, and laws of these ancient Kings from

documents or traditions; supplying, by his genius, as he no doubt did, when at a loss for information, what was necessary to make a perfect system. His disciples and commentators, particularly Mencius, subsequently supplied what he omitted. He deserves his imperishable fame, therefore, for having collected and published, in a succinct and philosophic manner, the scattered history and traditions of the moral and political government of the rulers and the ruled, which arose from the early development of their natural temperament, and were alike beneficial to both. It is highly probable, from the naturally passive temperament of this species, and the vanity and practical character incident to it, that the patriarchal government continued longer in its purity among them than with any other species; and, consequently, that the maxims and policy relating to it were better known to the people, and were, compatively, more easily collected from history and tradition. They had, however, in Confucius' time, become weakened in practice, though they were preserved, and were referred to by the people as their golden age. The Shemites had lost every trace of the patriarchal government by reason of their strenuous temperament, which was ever active, inquiring, and impatient of control. The Ishmaelites preserved it in their families, and more faintly in their tribes, but lost it in their nations, by reason of their callous temperament, and the pride, jealousy, contention, and nomadic habits incident to it. But the passive, and consequently contented and practical temperament of the Japhethites, was admirably adapted for a more permanent duration of patriarchal government; and

it was evidently calculated to promote their happiness. For the same reason, therefore, that Homer, Ossian, the Scalds and Bards of the Shemites, could animate the people with enthusiasm in the development of their destinies, because they were adapted to the temperaments and genius of the people,—so Confucius moulded the Japhethites, because his morals and politics were in harmony with their natures,—were, in fact, the mere record of what they had recently been, and what they had only corrupted, but not obliterated. If the Iliad had been published to the Chinese, and the works of Confucius to the Greeks, can any one imagine that the Chinese would have been Greeks in manners, habits, and tempers? Or that the Greeks would have been Chinese? All great men, such as Homer, Confucius, Ossian, &c., are great, because they exhibit graphically, faithfully, strikingly, and boldly, the natural temperaments, and consequent dispositions, manners, pursuits, passions, and inclinations, of the species they represent; precisely as a good painter will represent the beau ideal of human, animal, or scenic, beauty he designs to represent.

Thus we discover that intellect was an early object of fame with the Japhethites; that it arrived at perfection at a very early period, and became stereotyped by Confucius and his disciples, since when it has remained stationary. Intellectual fame is still an object of importance among them; but its object is not to make new discoveries, to extend the bounds of knowledge, but to know perfectly what has been accumulated; not to innovate upon, or extend science beyond their sacred and classical works, but to

become familiar with them; not so much an object of ambition for the benefit of mankind, by the advance of knowledge, as for the benefit of the individual as a means of advancement to office, and an exemption from labor.

It is singular, but in strict harmony with history, that the literature of each species is developed in strict conformity with their specific temperaments, so as to direct their ambitions in particular channels, or to limit them to particular objects. We have already remarked that the same peculiar and distinctive mode of thought observable in the earliest and rudest states of each species, accompanies them throughout every stage of development, in the progress of civilization; and we contrasted the Shemites and Ishmaelites to confirm the observation. The remark applies with no more force, but more apparently, to the Japhethites. There is no difficulty in tracing the perfect identity of thought and composition of the modern Japhethites, with their ancient types. They are so manifest that many acute men suppose all the development of the Chinese, for example, to have been caused by Confucius, as the original mould in which all succeeding generations have been cast: whereas it is evident that the original mould must be looked for long anterior to his time,—anterior to Yaou,—to Japheth, at the time when Shem, Canaan, and he were made the progenitors of distinct species of men.

What shall we say of the Canaanites? In what have they exhibited a desire for fame? Where is their literature, ancient or modern, to show that any degree of intellect has accompanied their achieve-

ments? Where their achievements to give an impulse to literature? For the sake of humanity we wish we had something to say of them in relation to this great incentive to human development; but, alas! they have had no Zoroaster, Lycurgus, Solon, or Confucius, to arrange their social organizations; no letters, symbols, or hieroglyphics, to record events; no object of fame, but to depredate, enslave, or destroy,—or to possess three thousand three hundred and thirty-three wives, or as many as will stretch across a kingdom, linked hand in hand!!

Speech is the next attribute in our list. We would have preferred the word language, if it had not been so frequently used by philosophers to denote the crow of the cock, the cackle of the hen, the low of the ox, the mew of the cat, and every variety of sound emitted by beast, bird, or insect; nay, even the vegetable kingdom has been dignified with a language, though we believe it is not yet invested with audible, but only visible vocal powers. It may be called the poetry of philosophy, by means of which subjects are invested with a kind of personified interest, similar to the Homeric machinery of the Iliad. We have no objection to it; but then it is attended with the difficulty, when we treat of a subject in plain prose, of enforcing upon the reader the necessity of discarding his poetic fancies, before he can learn matters of fact. This is not always so easy a matter as some may imagine; for although we boast of reason, as the great prime minister of our conduct, yet, like other prime ministers, she is subject to influences and impulses from other citizens of the brain, which too often subject her to dic-

tation and control. Imagination is not the least of these controlling influences. We have had her to contend against in various former parts of this work, and we meet her again here. We are not a Hercules, and have no desire to destroy the pretty hydra-headed monster, if we were; but we desire to turn her aside, that we may pass to our object without molestation.

Although we have no objection that animals and vegetables should be endowed with language, we object to the common division of the subject into *natural* and *artificial;* signifying by the first, animal impulsive tones of voice, expressive of simple and single desires, passions, or feelings; and by the last a series of words, or sentences, expressing a series of ideas of human thought. We regard human language, in its highest degree of improvement, as perfectly natural to man as any simple modulation of voice by any animal. It is true that to acquire a high degree of proficiency in language requires mind, industry, patience, and instruction, none of which is necessary to enable the cat to mew, the dog to bark, and the hen to cackle; but all the attributes of men are given in an embryotic condition, having a natural capability of indefinite improvement by cultivation. We espouse therefore the old theory of Epicurus, in opposition to Pythagoras and Plato, but not the commentaries of the Buffon, Linnæus, and Monboddo school.

What was the extent of the vocabulary of the original man cannot be known. Moses informs us that Adam named the animals of Paradise; which, to do it with propriety, required a power of language

equal to that of any philologist of the present day. If we discard his testimony we throw aside all that we can know of it. But although it is impossible to say what was originally the extent of human language, yet it is neither impossible, nor difficult to prove that it was by far more rich and extensive, than the instinctive, impulsive cries of animals. The history of mankind positively proves this fact; for no people have ever yet been discovered, however rude and secluded they may be, whose vocabulary is not infinitely more expressive than the most varied, and richest vocabulary of any animal. But this is not doing the subject justice; for the most degraded human beings yet discovered, have a vocabulary sufficiently powerful to be the vehicle of information, not only of their own ordinary pursuits, but many of the pursuits, occupations, and implements of civilized life.

If there were any grounds for the supposition that man was, originally, deficient in what is called artificial, in contradistinction to natural language, it would be fair to presume, that some beings would have been discovered on the globe, in the original condition of speech, having all the anatomical peculiarities of the human race. Our globe has been sufficiently explored to warrant the belief that there is no such being; and the presumption is, therefore, so strong against the advocates for the artificial and conventional formation of language, that the burden of direct and positive proof is thrown upon them.

The origin of language was by no means a thing of art. Every tongue was rich in words, and received its grammatical construction and arrange-

ment, long before science and art were in a condition to aid it. Arguing from the apparently complex formation of language, and the extraordinary qualifications and attainments required by an expert philologist, it was natural to suppose that great art was necessary to produce what so much science was required to understand and reduce to rule. It was not considered that what was produced naturally, and as it were spontaneously, required art and science to arrange by rule, and to discover its elements precisely as all the physical sciences have been constructed. There is no art in the construction of language, until the refinement of society has established rules to regulate it. It naturally arranges itself into grammatical order by the sensible objects which are its subjects. Nouns, pronouns, adjectives, and adverbs, with their declensions, cases, genders, numbers, degrees of comparison; verbs with their numbers, inflections,—in short, the whole grammatical arrangement of language, from vowels and consonants to prosody, is arranged in the savage tongues of unlettered barbarians, substantially upon the same principles as in the elaborately polished languages of Europe. If any one should doubt this let him examine Zeisberger's grammar of the Lenni Lenape tongue, and he will discover that what has been called the highest effort of human art and science has been fully accomplished by these children of nature. He will discover, too, what will surprise him, that the art of polishing and refining language consists more in lopping off and pruning redundancies, and in restricting the signification of words, than in altering or arranging its grammatical texture. He will find

that the verb, in what is called its most artful and complex structure, in all its niceties of number, mood, and tense, is accurately known to them, with as much precision as it is to us. He may not always find words for his refined abstract ideas. Locke's Essay on the Understanding might be difficult to be translated into the Lenni Lenape tongue, though it might not be an impossible thing to a scholar thoroughly versed in the language. He will be surprised too, to find that the compounding of words by their roots, by synthesis (Baron Von Humboldt calls it *agglutination*), to make them more expressive, is very extensively, and often very happily, used by them. The learned author of the Treatise, *On the Origin and Progress of Language*, being evidently unacquainted with the genius of the languages of the American savages, from whom his examples are taken, has fallen into the error of supposing these agglutinated words to be original "articulate sounds" formed to denote "a whole sentence rather than the name of a particular object:" whereas they may be, and frequently are, separated into the distinct words of which they are composed.

Every known language in the world,—the most rude and barbarous tongue of Africa, or New Holland, is constructed with grammatical precision, and has a singular analogy in words and structure to the most polished languages of civilized nations: and what is yet more remarkable, types of every polished language, even those which we consider the most artifical, and highly labored,—the Greek for instance —may be found among the savage nations who never heard of a grammar, and never knew a letter.

Despised as the languages of our Aborigines have been, and barren as they have been supposed to be, they are nevertheless as artful in their construction, as rich in words to suit the purposes of the people, and as euphonious as most polished languages. In all these things they are better typified by the Greek than any other. Mr. Duponceau, in his preface to his translation of "A Grammar of the Language of the Lenni Lenape or Delaware Indians. Translated for the American Philosophical Society from the German manuscript of the late Rev. David Zeisberger,"—makes the following sensible and philosophic remarks. "Language is the instrument of thought, and must always be adequate to its object. Therefore, no language has yet been found, and probably none will ever be found, destitute of forms; for without them none can exist. By forms I do not mean only inflexions of words, and the like; I mean every regular and methodical arrangement of the elements of speech for practical purposes. This the Chinese have, as well as the Delawares, although in vulgar acceptation it is commonly said, that the Chinese idiom has no forms. Like everything else in nature, the forms of language are various, and in that variety consists the chief beauty of the works of the Almighty Creator. A language, it is true, may be more or less adapted to certain objects. Some are more poetical than others, while there are those which are better suited to the perspicuity of logical reasoning. But it is only after they have been moulded by the hand of genius, that this particular character becomes apparent. Who can say what Homer would have produced, if he had had for his instrument the

language of the Lenni Lenape? This, however, we may safely assert, that *he would have been able to say more in fewer words, than even in his own admirable Greek.* Every mode of speech has its peculiar qualities, susceptible of being developed and improved by cultivation; but like flowers and plants, all languages have a regular organization, and none can be called barbarous, in the sense which presumption has affixed to that word. An unorganized language would be a chaos, unfit to be used as the medium of intercourse between men. No memory could retain a long list of arbitrary words, if order and method, founded on analogy, did not come to its aid. Grammatical forms, therefore, are as necessary to human languages, as the organs of life and vegetation are to animals and plants. Neither could exist without them."

All languages receive their fixed and unalterable elementary principles from the temperament of the people, independent of civilization or cultivation. More embellished and rich they may become by cultivation, precisely as an individual may acquire a polished ease of deportment by frequent intercourse with refined society; but the structure and adaptation "to certain objects" will for ever remain unchangeable and unalterable by the highest efforts of genius. We think it would be beyond the power of genius to mould the French language to be as well adapted to blank verse or epic poetry as the English; and it would be quite as impossible for "the hand of genius" to adapt the English to the conversational power and elegant suavities of the French. This peculiar adaptation of language to an object is part of its

fabric, its constitution, and however enriched or polished it may become by "the hand of genius," the substance must remain the same; like the marble or granite, fashioned by "the hand of genius" into an elegant statue, the form, polish, and elegant finish of the artist have made no alteration in the nature and substance of the material.

It is a clearly established historical fact that, notwithstanding all the convulsions of nations by wars and conquests,—notwithstanding all the influence of courts and men of learning,—the grammatical construction of the language of every people has essentially maintained its original form, amidst every vicissitude, and every influence, short of numerically overwhelming masses of foreigners. "No convulsions of government," says Mr. Richardson, in his Dissertation on the Languages, &c., of the Eastern Nations, "no efforts of the learned, can ever so far alter a language, as to deface every line of resemblance between the speech of the present day and that even of the remotest ancestry: nothing but the absolute extirpation of the aboriginal natives can apparently accomplish so singular a revolution. If we look into the languages of modern Europe, we shall discover everywhere the strongest features of their Gothic or Celtic original, amidst all the refinements of Roman and Grecian embellishment. If we examine the dialect of the modern Greeks, notwithstanding their slavish subjection to the despotism of the Turks, we shall find the corruption but slightly disguises the original tongue. When we view the Syriac, after that country had long been under the rule of Alexander's successors, the texture we per-

ceive unaltered; a slight mixture of Grecian words making all the difference. When we compare the modern Persian with the idiom which prevailed during the Sassanian dynasty, we observe it now only enriched by a copious introduction of Arabic words; yet still retaining every characteristic feature which it possessed before the Mohammedan conquest."

The Romans enriched every language of the people of Europe whom they conquered, by giving to them words which were adopted into, and made to conform to the several tongues; but they never essentially altered the genius of the language of any of them. The Normans conquered England, and they endeavored to force their language upon the people, by using it at Court, and in legal proceedings: and yet, although they introduced more words into it than remain of the Saxon, yet they never altered the Saxon character of the language, to which, in a few generations, they were compelled to conform.

Comparative anatomists tell us that several of the monkey tribes, as well as other animals, have laryngeal organizations adapted to the powers of speech. "The tongue of a monkey is as perfect as that of man," says Mr. Lawrence, Lect., p. 203. "Cowper asserts that the laryngeal pouch renders it impossible for the orang-utang to speak. I do not clearly understand how this is ascertained; but allowing its truth, there are other monkeys who have not this pouch, and yet cannot speak.

"Several animals may be taught to pronounce words, and even to repeat sentences; which proves

clearly that the want of speech is not owing to any defect in their organs."

"Language," he continues, "implies a train of thinking; and for this reason brute animals are incapable of speech: for though their external senses are not inferior to our own, and though we should allow some of them to possess a faint dawn of comparison, reflection, and judgment, it is certain that they are unable to form that association of ideas in which alone the essence of thought consists.

"The possession of speech, therefore, corresponds to the more numerous, diversified, and exalted intellectual and moral endowments of man, and is a necessary aid to their exercise and full development. The ruder faculties, and simple feelings of animals do not require such assistance. The natural language of inarticulate sounds, gestures, and actions, suffices for their purposes."

Thus we perceive that it is not owing to any defect of organization that many animals do not speak as well as man. It is a remarkable fact that those animals which approach nearest to the perfect organization of man,—the chimpanzee and his congeners,—cannot be taught to speak; while some which are far removed from him in form, and consequently structure, and are deficient in teeth and flexible lips,—the parrots, jays, and starlings,—may be taught to utter words, and even sentences.

The above facts are directly opposed to the theory that man, in his original condition, was deficient in what is called artificial language; for if there was a time when he only possessed the natural language of animals, as cries, and what grammarians call in-

terjections, which are possessed by monkeys, parrots, and most animals, where is the peculiar organization which has enabled him to separate himself from them all, by an art so immensely beyond his conceivable powers, in such condition; the invention of which has placed him not only immeasurably above them, but within the pale of moral responsibility? Lamark, the author of the Vestiges of Creation, and the whole school of philosophers who have advocated the progressive development of organic life by a law of nature, independently of direct creative power, have advocated nothing more extravagant than such a doctrine,—nothing which draws more largely upon the faith and credulity of men! We confess that we have been surprised that the ingenious author of the "Vestiges of the Natural History of Creation," did not quote the many highly respectable authorities on this subject, to show how very general was the belief, in high and learned quarters, of the progressive development of creation. He certainly wanted all the authorities he could obtain, besides his ingenious inferences; and these would have answered his purpose, if not as well as the *Acarus Crossii*, at least for cumulative proof. Dr. Prichard, in his "Natural History of Man," p. 66, has given to animals "psychological characteristics." As they had cries and interjections before the learned gentleman endowed them with this only remaining attribute of human distinction, we should not be surprised to hear our cows, horses, and hogs, speak in good artificial languages, and discuss moral subjects.

The doctrine of the arbitrary, artificial, and con-

ventional formation of language, may appear so strange to some of our intelligent readers who have not paid attention to the subject, that, if we should quote no respectable authority for it, they might imagine that we have set up a man of straw for the pleasure of demolishing him. To avoid such a suspicion, and at the same time to have an opportunity to place the subject in its proper light before them, we will quote a few passages from Blair's Lectures. We select this work not only for its high authority, but because it is so generally diffused as to be in the hands of, or accessible by, every person. The learned Lecturer is not entitled to the merit of having originated the theory; for it refers back, through a long list of distinguished men to Plato and Pythagoras. We quote from Vol. I., Lect. 6.

"Those exclamations, therefore, which by grammarians are called interjections, uttered in a strong and passionate manner, were, beyond doubt, the first elements or beginnings of speech."—p. 72, Vol. I.

"Interjections, I showed, or passionate exclamations, were the first elements of speech. Men labored to communicate their feelings to one another, by those expressive cries and gestures which nature taught them. After words, or names of objects, began to be invented, this mode of speaking, by natural signs, could not be all at once disused. For language, in its infancy, must have been extremely barren; and there certainly was a period among all rude nations when conversation was carried on by a very few words, intermixed with many exclamations and earnest gestures."—p. 75, Vol. I.

"Carry your thoughts back to the first dawn of

language among men. Reflect upon the feeble beginnings from which it must have arisen, and upon the many great obstacles which it must have encountered in its progress; and you will find reason for the highest astonishment at viewing the height it has now attained. We admire several of the inventions of art; we plume ourselves on some discoveries which have been made in latter ages, serving to advance knowledge, and to render life comfortable; we speak of them as the boast of reason. But certainly no invention is entitled to any such degree of admiration as that of language; which, too, must have been the product of the first and rudest ages, if indeed it can be considered a human invention at all."—p. 70, Vol. I.

One more. "The connexion between words and ideas may, in general, be considered as arbitrary and conventional, owing to the agreement of men among themselves; the clear proof of which is, that different nations have different languages, or a different set of articulate sounds, which they have chosen for communicating their ideas."—*Id.*

The doctrine thus set forth broadly by Dr. Blair, is, for anything we know to the contrary, that which is now maintained by rhetoricians, and taught in our universities and other seminaries. The only proof offered for it,—or rather, in the words of the learned and elegant lecturer—"the clear proof of which is, that different nations have different languages, or a different set of articulate sounds, which they have chosen for communicating their ideas." The whole position, therefore, rests upon this "clear proof." Let us examine it. But let us first endeavor

accurately to determine, if we can, what is designed to be understood by language being "considered *arbitrary* and *conventional*, owing to the *agreement* of men among themselves."

If the word "arbitrary" were only designed to express the opinion that no reason can be given why any word should convey a particular idea, rather than any other, as, for instance, that the word horse signifies a particular animal, and not a house,—and that it acquired this exclusive signification by the tacit and implied consent of those who use it; that this implied arbitrary consent is the conventional agreement by which it has acquired this restricted signification; and that this implied consent, and this implied conventional agreement indicate the artificial formation of language; although such opinions might be controverted for good reasons, and upon high authority, as we will presently show, we might not think it worth the labor to contend against them. But these are not the ideas intended to be conveyed by the words arbitrary, conventional, and artificial.

It is difficult to ascertain clearly what process Dr. Blair thought was adopted for the formation of language; yet the mode, must, in his opinion, have been active, and not implied. "Think of the circumstances," says he, p. 71, "of mankind when languages began to be formed. They were a wandering scattered race; no society among them except families; and the family society, too, very imperfect, as their method of living by hunting or pasturage must have separated them frequently from one another. In this situation, when so much divided, and their in-

tercourse so rare, how could any one set of sounds, or words, be generally agreed on as the signs of their ideas? Supposing that a few, whom chance or necessity threw together, agreed by some means upon certain signs, yet by what authority could these be propagated among other tribes or families, so as to spread and grow up into a language? One would think, that in order to any language fixing and extending itself, men must have been previously gathered together in considerable numbers." Here, at least, we have something definitively fixed. First, that before language "began to be formed" men "were a wandering scattered race."—Secondly, that they had no language in their "families."—And thirdly, that "a few, whom chance or necessity threw together,"—or "men must have been previously gathered together in considerable numbers," to agree, "by some means," "upon certain signs" for a language. On a future page (72) he tells us how he supposes the convention to have proceeded in the important business upon which it was convened, viz.: "Undoubtedly, by imitating, as much as possible, the nature of the object which they named, by the sound of the name which they gave to it. As a painter, who would present grass, must employ green color; so in the beginnings of language, one giving a name to any thing harsh or boisterous, would of course employ a harsh or boisterous sound." But we do not design to follow him into the business of this august body; for we cannot, by any means we can devise, see how such a convention could be collected.

If men were originally so rude as to have no lan-

guage but cries, and what grammarians call interjections, we think it would have been exceedingly difficult for them to have formed a convention to agree upon any arbitrary principles of a conventional language, in the most rude conceivable form; and much less to lay a regular foundation for so complex and artful a system of words, as is to be found in the rudest and most barren language on the earth. The first thing to be supposed is, that, although they could only utter cries, they were sensible of their want of a more perfect articulation, and of their ability to accomplish it. The next supposition is, that a number of men should have some means of communicating with each other, for the purpose of obtaining a concurrence of opinion, in regard to such deficiency, and the practicability of amendment by a conventional agreement. A third supposition is necessary, that such convention, or some influential member of it, should have grammatical rules, at least the business, preformed or digested, upon which the language should be constructed. The mere statement of these absolutely essential pre-requisites, and the evident absolute impossibility that they could be accomplished by beings who could only utter cries and interjections, form such strong objections to a theory of such utter degradation of the original man, that our readers will excuse us for not undertaking to refute it. If we suppose him to have meant some other, and more informal proceeding,—some "few, whom chance or necessity threw together," at which they first agreed upon the names of things, or the principles upon which names should be constructed, by the sound,—as that a certain bird

should be called "the cuckoo, from the sound which it emits,"—the difficulties are substantially the same, and are too great to require a serious refutation.

We have seen no theory of the learned which, in the least degree, approaches to the credibility and rationality of the Mosaic account. If his history of the matter is a cunningly devised fable of human invention, as some pretend it is, it is one of the most remarkable examples of human ingenuity and wisdom upon record. Human invention would never have thought of describing Adam to have been created an adult man, with all of his attributes developed to the proper degree to enable him to be the progenitor and prototype of the human race.

It would more naturally represent the first human pair as infants, nursed by some kind wolf, bear, or other animal, and the man and woman coming together by some romantic adventure. Such a creation and a bringing up would be in harmony with the ingenuity displayed by great and learned rhetoricians in accounting for the "rise and progress" of language. Moses tells us, on the contrary, that Adam was created an adult man, with all the necessary appurtenances which should belong to the great father of the human famity. Language he must have possessed in a high degree of perfection; for "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 whatsoever Adam called every living creature, that was the name thereof."—Gen. ii. 19. And after he awoke from his deep sleep, when Eve, his lovely wife, was brought to him, he might well have uttered cries

and interjections of joy, and it is highly probable he did, for it was natural; but we are told he said—"This is now bone of my bones and flesh of my flesh; she shall be called woman, because she was taken out of man." It appears from this, that Adam, in giving names, paid regard to the natures of things, which, taking into consideration the number and variety of animals named by him, is an evidence of an extent of natural science, and a knowledge of language, equal to any of our great classifiers.

Having ascertained the fact, that the original pair of human beings had a language, not only rich enough to answer their own purposes, but to supply future generations with the names of animals. It is not necessary to inquire by what means they obtained it; but we may be excused for hazarding a few conjectures on the subject, which will be at least as rational as any theory that has yet been devised. First—It could not have been by any conventional form whatever; for Adam named the animals before Eve was created, and named her, and gave a reason for it, the moment he first saw her, and there was then no person with whom he could make an agreement. Secondly—It was not an arbitrary invention by him, because he possessed it immediately after he was created, and while the creation of animals was in progress; for God "brought them unto Adam to see what he would call them," as they were created, and he named them before he could have time to invent a language or to feel a necessity for it, because it was before he had time to experience any deficiency. Thirdly—It was not innate in his nature, or it would be innate in all man-

kind, his posterity, which we know not to be true; for children are taught by imitation, and the deaf are always dumb.

Fourthly, and lastly—It must, and could only have been by Divine inspiration, or intuition, as a necessary finish to the adult man, without which he would have been the weakest of all God's creatures, instead of a being designed to have "dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth on the earth. Gen. i. 26. It is speech, human language, which confirms this power. Without it progressive development could not take place, nor moral responsibility exist. In short, man would not be what he is. We defy human ingenuity to devise any other rational and satisfactory mode by which man could acquire language. We confess it not to be an innate power, for man is not born with language, but with an organization capable of acquiring it. The infant must be taught a language, and may be taught any idiom; but without being taught will not have any. The deaf born are always dumb. These are proofs that language is not innate; and they are equally proofs that it is not a human invention; and we may also say, that they are equally conclusive proofs of the truth of the Mosaic account. We cannot refrain again, as we have repeatedly done before, to notice the singular fact, that a fair and unbiassed investigation into the natural history of man should lead us so repeatedly to a corroboration of the Mosaic record, without any design on our part; for, we think, our readers will do us the justice

to admit, that without a theory to support, a bias to gratify, a prejudice to overcome, or a desire to avoid any just conclusion, we discuss the subject fairly, and impartially, according to the measure of our intellect.

Having found the first human pair endowed with language, "the clear proof" mentioned by Dr. Blair, of the arbitrary, conventional, and artificial formation of language, viz.: "that different nations have different languages, or a different set of articulate sounds, which they have chosen for communicating their ideas," demands our attention.

That so profound and elegant a scholar should regard this fact to be "clear proof" of the arbitrary, conventional, and artificial formation of language, can only be accounted for on the supposition that he thought it too self-evident to require proof. He, probably, imbibed the theory in his academic course of instruction, and his subsequent reading had confirmed what his mind had never been led to question. Weak proof would appear very strong to a mind so pre-occupied. Indeed no proof appeared to him to be required, as he only mentioned this, as it were, incidentally (for he does not enlarge upon it), while he omitted the stronger proofs, usedby some other authors, of the inability of children to speak until taught, and of those born deaf to speak at all.

The learned lecturer could not desire to be understood "that different nations have different languages," because each had invented and agreed upon different arbitrary articulations, or words, to constitute a language. In other words, that this grand invention has been made by all nations having different articu-

fate sounds; for he could trace his own pure English from the Saxon, not by any arbitrary or conventional formation, but by the conquest of the Romans, Danes, and especially the Normans, "together with such new and foreign words as commerce and learning have, in the progress of time, gradually introduced:" and yet, if he did not mean so to be understood, we are at a loss to discover how the different languages of different nations prove anything; for unless each nation made the invention for itself, it proves nothing in regard to the manner of doing it originally. There was nothing arbitrary, conventional, nor artificial in any of those languages which are derived from others; and of this character are nearly all of the modern languages of Europe. We have already mentioned the probability that the original language of man was the Hebrew; and that, at the confusion of tongues at Babel, this idiom was preserved to the Hamo-Shemitic family, while the Japhethites and Canaanites received each a different dialect, or a radically distinct language. Our limits will not permit us to enlarge upon this subject, nor does the question we are considering require it, because all languages may have been derived from one original tongue, as well as from the whole seventy which the Jewish Doctors supposed to have been miraculously produced at Babel. The English, the Norman French, the Danish, and several other European tongues, have the same original Teutonic derivation; and the same people, in the same country, speaking the same language, sometimes acquire a difference of dialect so great as to make intercommunication almost impossible. In England, a ge-

nuine Yorkshireman and Cockney might want an interpreter. In civilized nations, from various causes, but especially by reason of the discovery of the art of printing, language becomes comparatively permanent, because standards are fixed to which nations conform. In this sense language becomes arbitrary, conventional, and artificial, by the progress of refinement. But in pastoral, roving, and savage countries, in which every tribe has its own dialect, or distinct language, it has been discovered that each tribe changes its dialect with almost every generation. This fact, not having been adverted to by travellers, has sometimes produced angry disputes about the veracity of many of them, who have reported very differently of the same people: whereas all may have been correct, although directly opposed to each other in their vocabularies; but the language of the people had changed.

In Moffat's "Missionary Labors and Scenes in Southern Africa," p. 19, is the following account of the change of languages. "The next problem is the variety of languages spoken by the Bushmen, even when nothing but a range of hills, or a river, intervenes between the tribes, and none of these dialects is understood by the Hottentots. This may be solved with still greater ease, by again referring to the Balala. The dialects of the Bechuana, as spoken by these people, especially in districts remote from the towns, is so different from that spoken by the nation generally, that interpreters are frequently required. In order to account for this, it is necessary to become acquainted with their habits. In the towns the purity and harmony of the language is

kept up by their pitchos or public meetings, at which the finest language is spoken, by their festivals and ceremonies, as well as by their songs and their constant intercourse; for, like the Athenians of old, they are ever telling or hearing some 'new thing;' and the first question a person who has come from a neighboring village is asked, will be '*Lo ye'lang gona?*' What do you eat there? or, '*Mpuléla mahuku.*' Tell me the news. There is no end to conversation, excepting when sleep overcomes, or pinching hunger prevails. With the isolated villages of the desert, it is far otherwise. They have no such meetings, no festivals, no cattle, nor any kind of manufactures to keep their energies alive; riches they have none, their sole care being to keep body and soul together; to accomplish this, is with them their 'chief end;' they are compelled to traverse the wilds, often to a great distance from their native village. On such occasions, fathers and mothers, and all who can bear a burden, often set out for weeks at a time, and leave their children to the care of two or more infirm people. The infant progeny, some of whom are beginning to lisp, while others can just master a whole sentence, and those still farther advanced, romping and playing together, the children of nature, through the livelong day, become habituated to a language of their own. The more voluble condescend to the less precocious, and thus from this infant Babel proceeds a dialect composed of a host of mongrel words and phrases joined together without rule, and in the course of a generation the entire character of the language is changed."

Here, then, is at least one way by which a new

dialect may be introduced, by a mode directly opposed to anything arbitrary, conventional, or artificial; unless the learned Lecturer designed to apply these terms, technically and scientifically, to circumstances wholly different from their true significations. This is probably the chief cause why every savage tribe has a particular dialect distinguishing it from all others, although evidently from the same original stem. Although it is certain that the various dialects of the world have not generally arisen from such "infant Babels," because the influences which produce a change in them are many and various, yet they are all attributable to some cause equally as opposed to any arbitrary, conventional, or artificial formation. A mere change of climate produces a change in the laryngeal apparatus, affecting the pronunciation. New scenery, new wants, and, above all, the constitutional temperaments of a people, not only produce new words and a different pronunciation, but stamp a character upon language so different that without a close investigation they appear to be wholly distinct. It is not until a people have made considerable progress in civilization that "the hand of genius" is applied to polish and improve a language. Words are often compounded by their roots, without any grammatical art, and yet to all appearance very artificially performed, by nations of savages; but a people must have made some progress in arts, sciences, or commerce, before they import, or naturalize foreign words.

It is no part of our present object, however, to discuss the vexed question of the progress of language, farther than may be necessary to demonstrate its

origin. The object at which we aim is to establish the fact that speech, or human language, in some state more perfect than simple animal cries or interjections, is an attribute of human nature,—a gift by the Creator,—and not an arbitrary, conventional, or artificial invention, predicated upon cries and interjections.

We hope we have accomplished this seemingly plain, though really difficult matter, to the satisfaction of a large majority of our readers. But there are many of the learned, whose educations have firmly fixed the contrary doctrine in their minds, who will retain their former opinion. To them we say that we call upon them to show any nation of the earth, the most rude and savage yet discovered, whose language is so little developed from cries and interjections, as to lead to a fair presumption that they have made but a step or two from the original condition. We have shown that savage nations have language in all its parts, and all of its complex machinery, observable among the most polished nations, and we might easily have multiplied similar examples, if we had thought proper; but we have given enough to raise so violent a presumption that it is an attribute of man, that, in the language of lawyers, we have thrown the *onus probandi* upon our adversaries. When to this violent presumption is added the testimony of Moses, which is clear and explicit, notwithstanding the liberal construction of our opponents, we think there is scarcely room for a rational doubt.

We might now proceed to our inferences, but there is another item of the subject which demands

a passing notice, as well because it adds cumulative proof to the preceding remarks, as from its own importance. We allude to the fact, which we have before noticed, that all of the European, most of the Western Asiatic, and the most prominent of the North African languages, have been traced by philologists, if not actually to one single tongue, yet so near to it as to leave little doubt that they all had a common origin. It would lead us beyond our limits to detail the facts upon which this assertion is founded; nor do they properly belong to this outline of the natural history of man, but to the history of each species, if we should find encouragement, time, and inclination to attempt such a task. Ethnology, a recent, a highly interesting, and a valuable science, is founded on the ascertained fact, that a great variety of apparently dissimilar languages have a common origin, and may be traced by their affinities to an original stem.

A classification of languages into Shemitic, Hamitic, and Japhethic has been made and descanted upon, with great erudition, by several authors; but by none more forcibly and elegantly than the author of the "History of Maritime and Inland Discovery," in Lardner's Cabinet Cyclopædia. He has followed Josephus in the distribution of the descendants of the patriarchs, in all of which we differ from him, for reasons heretofore given; but a difference in regard to the patriarchs does not imply a difference in relation to the affiliation of languages. According to our theory, the classification of languages would be more properly made into Shemitic, Hamo-Shemitic, Japhethic, and Canaanitic. To the Israelites

would belong the Shemitic tongue, they being acknowleged to have been the lineal descendants of Shem; from whom it branched to the Ishmaelites and others, whose languages have a known affinity to the Hebrew. The Pelasgians, the ancient Syrians and Phœnicians, the ancient Egyptians, the Goths, the Celts, and the Sclavons, had Hamo-Shemitic dialects. From these all the European tongues, ancient and modern, have sprung. Ancient India, from the Ganges to the eastern extremity of Asia, including "the Isles," had the Japhethic. And Canaan, including the north west of Arabia, and all of Africa (except Egypt, part of Abyssinia, and probably the border on the Mediterranean north of the Atlas mountains), the Canaanitic. If this distribution should be correct, it will be apparent, that, as they all had a common root, there must be general affiliation, which agrees with the facts in regard to them, so far as they are ascertained. This distribution of languages will account for the fact that although the Greek, the Gothic, the Celtic, and the Sclavonic languages may be each resolved into roots within themselves, yet these radical primitives bear so close a resemblance to corresponding radicals in the Hebrew, as to leave no doubt of their common original derivation. So close is this resemblance, that some have supposed them to have been derived from the Hebrew; whereas the Hebrew itself is only a dialect of pure Shemitic descent from the original Noachian or Adamic tongue, to which the Hamo-Shemitic bears a close collateral affinity; while the Japhethic and Canaanitic are farther removed, by the confusion of

tongues at Babel; but yet possessing characteristics denoting their relationship.

This universal pointing to one common origin of all languages, is an additional proof that it was a gift from the Creator, and not an arbitrary, conventional, and artificial invention of man.

To pursue the plan we have hitherto pursued with the other attributes, we should now contrast the languages of the different species in respect to the peculiar characteristics impressed upon each by their specific temperaments. No doubt can be entertained but that such a character must be exhibited by them. The peculiar national traits of character of the same species might be exhibited by their languages almost as clearly as by a direct description. The languages of the English, French, Spanish, Italian, and German nations, indicate the characters of the people with much distinctness; and, undoubtedly, those of the several species will each contrast still more forcibly. This is very apparent in the language of the nations composing the Japhethic family; between whom and the Shemites there is no difficulty in drawing the contrast. But we confess ourself incompetent to the task of exhibiting, with any tolerable distinctness, satisfactory to our own mind, the difference between the Japhethites, Ishmaelites, and Canaanites; which would require a more accurate knowledge of the genius of their respective tongues than we possess, or have the present means of obtaining.

Having objected to the common, we may say universal, division of language into natural and artificial, it is proper before we leave this branch of our sub-

ject, to propose some other more natural names in their places. Although very limited in their vocabularies, animals have a language, by which they convey impressions to their associates, which should have a name. We propose Instinctive Language, for that of animals, and simply Language, to denote human speech. The reasons for this division are so apparent that none are required to be given; but in addition to those which will naturally present themselves to the reader's mind, we may remark that it is always important, if they will admit of it, to restrict words to a single signification, by which precision of thought may be attained.

Reason, or causality, our next and last human attribute, has been given to animals with greater liberality than good judgment. We have heretofore compared human reason, or causality, with the instinct of animals, and think it now unnecessary to add to the reasons given that animals do not possess the human attribute. But if we should grant, for argument's sake, that they have some degree of reason, or causality, analogous to the human attribute, yet it must be confessed that it is in man a far more extensive, powerful, and important instrument than it is in animals. It is a prominent and capital feature of the human attribute, that it is capable of indefinite cultivation by its own energies, by its own capability; whereas animals have no capability to improve any germ of reason they may possess, by any power in themselves; for what they gain by association with man, is no more their own, than the words of a parrot constitute his artificial speech, formed by his own energies. If, therefore, we should grant

to the prodigally charitable advocates for animal equality with man, that they possess all the germs of physical and psychical perfections of man, they will gain nothing by our liberality; because it must still remain evident that, for some reason connected with their physical or physiological constitutions, the difference between them and man is as great as we can conceive it to subsist between men and angels. It is therefore exclusively a human attribute in degree or capability of progressive development, whatever opinion may be entertained of the elementary principle.

Phrenologists, besides causality, have a distinct organ for comparison. We have never been able to comprehend, exactly, the distinction between them. To compare things, necessarily implies the exercise of reason to discover wherein they differ, or agree; and to reason about things necessarily implies a comparison of their qualities, properties, and relations. If a man possess an attribute, or organ of comparison, distinct and independent of causality, he must have the power of intuitively discerning qualities, properties, and relations, which we think, will scarcely be claimed for him. We can discover no process by which the mind can compare things, but by the operation of reason; nor any process of reasoning without the aid of comparison.

A number of other distinct faculties, or organs of the mind, are made by phrenologists, which, so far as they are human powers exclusively, have no existence distinct from causality. Individuality, eventuality, form, size, weight, locality, order, and number, are of this kind. The word causality we use

in a generic sense, embracing all such powers; because any exercise of them, in a higher degree than mere animal instinct, depends wholly upon the reasoning power. Thus, for instance, a knowledge of number, as a mere abstract notion of physical power, is common to man and all social animals; but the science of figures, in all of its branches, is eminently dependent upon reason, and requires the exercise of its highest powers. In the first sense it is an animal instinct, and in the second a human attribute. Although this last *may* be built upon the first, as its foundation, yet there must be a vast difference in its quality, or adaptation to an end, and capability of progressive development, in which sense it must be exclusively human.

In the comprehensive sense in which we use the word, causality depends upon the external senses for the greater part of its powers; for although it is an attribute susceptible of infinite development, it is wholly dependent upon relations, qualities, and properties of things, for such development. Even the reflex senses, or the power of the mind to act upon its own ideas, could never have an existence in persons devoid of ideas of external things. The power of abstraction necessarily supposes the possession of ideas for the mind to reflect upon. To make a Locke, a Berkeley, a Hume, a Reid, or a Stewart, it is first necessary to exercise the mind severely upon sensible things, before it can acquire that nice discrimination necessary to treat of the mists of its own properties and powers. The whole process of abstract reasoning is purely analogical: and although some of our brightest intellects have questioned the

existence of matter, they overlooked the fact that the very ability to question it was derived from a knowledge of the thing denied. It is not the less analogical because such analogy is neither mentioned nor thought of in the process; for even our plainest language abounds in such figures or analogies, which, by frequent use, we employ unconsciously. If any person will attempt to express himself upon any abstract subject, in a few sentences, without the help of any figure of speech, he will find it more difficult than he imagined; for he will find most of the important words which present themselves for use, will have a figurative, and not a literal signification.

If causality depends upon the external senses for its powers, it follows, that it will vary in the several species of men, in proportion to their specific anatomical and physiological differences; in other words, as they differ in constitutional temperaments.

When treating of the other attributes we necessarily said so much in regard to causality, that we might pass it by without injury to our design. But its very high importance, next to adoration, and probably equal to it, in giving form and direction to the specific characters of men, induces us to give it a brief but comprehensive consideration.

If we could, with any certainty, ascertain the degree of civilization of Noah and his family with precision, in other words the degree of civilization of the antediluvian world, represented in the post-diluvian by Noah and family,—we should have a fair starting point, an accurate test by which to judge of the progression or retrogression of the different spe-

cies of men. But, unfortunately, all the learned have agreed to consider man, in his original state, not only as a savage barbarian, but even destitute of any language but cries and interjections; and, consequently, that every degree of civilization, beyond eating fruits, roots, and animals, without fire to cook them; and every articulation of language, as an artificial condition, something not originally belonging to him. If this were positively known to be true, it might also answer our purpose, as a standard; but it is opposed to reason, and still more opposed to the scanty fragments of history, exclusive of the sacred volume, which is conclusive against it. We have opposed this opinion upon every opportunity.

Fragmentary and imperfect as the early history of mankind is acknowledged to be, yet so many remains of this period lie scattered over the ancient world, from Italy to India, and from Mount Caucasus to Upper Egypt, all inclusive,—and particularly in Egypt and ancient Chaldea, or the Babylonian Empire,—that, taken in conjunction with the fragments of history, they present to the candid inquirer a series of facts sufficient to impart the required knowledge, with very little assistance from Scripture.

According to our theory of the human race, the earliest history we have of any of the species, including the Mosaic record, is of the Shemites, and their immediate and close relations, the Hamo-Shemites. These occupied the valley of the Euphrates, and, among their earliest acts, founded the great cities of Babylon and Nineveh. How soon after the commencement of Babylon the colony separated which founded Egypt, is uncertain; but it must have

been at a very early period, as it is generally agreed that this kingdom was founded by Mizraim, the son of Ham, the grandson of Noah. So also other colonies must have early separated; for we soon find Assyria founded by Nimrod, the great grandson of Noah, and Aramea, or Syria, founded by Aram, the son of Shem, and grandson of Noah. Canaan and Phœnicia were probably occupied a little earlier than the countries above named. Thus we discover that all the nations earliest known as the seats of civilization, and from which it spread to others who had lost it, moved in masses from the original seat at a very early period of the patriarchal age, no doubt carrying with them the state of civilization which Noah and his family had derived from the antediluvians. We say no doubt; because it is highly improbable, nay impossible in the nature of things, that Shem, Ham, and Japheth, who were antediluvians, and their descendants removed one or two degrees only, in a close and compact population, should have lost any of the civilization they possessed originally; but we assert it on the still stronger ground that, making allowances for the different influences in which the different colonies were placed, by climate, scenery, productions, and the general physical characters of their new homes, a remarkable sameness characterizes the predominant features of civilization of every one of them. The same general features of colossal architecture, as well as the general texture of their social regulations; the same general state of advancement in the arts and sciences, prevailed at Babylon and Nineveh, in Egypt, Canaan, Phœnicia, and Syria, modified only

by localities and surrounding influences, long before Greece, Persia, or Arabia, were nations. The same remarks will apply to the Hindus, who had a contemporary and a similar civilization, which can be traced in their ancient ruins, as well as in their histories, their mythology, their ancient legends, and poetry. And the Chinese, who are, probably, notwithstanding their claim to extreme antiquity, a more recent people than the Hindus (very probably a part of the same original stock), bear the impression of the same civilization too prominently to be mistaken. Even the south of Europe has exhibited the same marks of this early degree of civilization by the Cyclopian ruins, which were anterior to the recollection or tradition of the Pelasgians, who were the immediate progenitors of the Greeks. Except in the south of Europe where the manners and habits, together with the Cyclopian architecture, were very early changed and lost by reason of the peculiar, wandering, and comparatively small communities of the early Pelasgi, throughout the whole of this extensive ancient world, from India to Egypt, both included, and from the Persian Gulf to the northern extremity of Aramea, the points of resemblance are peculiarly remarkable. Animal worship, a belief in metempsychosis, the division of the people into tribes, a colossal and peculiar architecture, the construction of immense lakes, numerous canals, with hydraulic machines to effect similar purposes in Chaldea and Egypt, their astronomy and astrology identical in kind and degree, and even a song mentioned by Herodotus, Lib. II., Cap. 79, of very ancient tradition common to the Egyptians, the

Greeks, the Phœnicians "and other places," probably the whole of the region we have mentioned. "Of all things," says he, "which astonished me in Egypt, nothing more perplexed me than my curiosity to know whence the Egyptians learned this song, so entirely resembling the Linus of the Greeks; it is of the remotest antiquity among them, and they call it Maneros. They have a tradition that Maneros was the only son of their first monarch; and that having prematurely died, they instituted these melancholy strains in his honor, constituting their first, and in earlier times their only song."

All this similitude prevailed at so early a period of the world that, unless we discard the authority of sacred and profane history, we cannot believe such improvements to have been made by human exertions alone, in the short period which intervened between the flood and the building of Babylon and Nineveh, and the foundation of Egypt and Phœnicia, all in the full practice of their institutions, arts, and sciences, almost simultaneously; for they were all "known in the tree but never in the sapling."

Thus, although all of these nations differed in the details incident to their localities, their grand features represented a family likeness, and common parentage. Egyptian architecture has outlived the Chaldean, not because it was more colossal, or constructed with greater skill, but because the materials were more imperishable; for instead of the granite of Egypt, the Chaldeans were compelled to use bricks, which were made similarly in both countries.

This period may be called the Patriarchal, or Colossal period of the world; the starting point, or

standard of human civilization, which extended down to the civilization of the Greeks, with, probably, very little comparative improvement. Migrations from the common centre in large masses, as the Egyptians and Hindoos preserved their original civilization; while those in smaller hordes, as the Pelasgians, who were the ancestors of the Greeks, and the Cimmerians of the Germans, lost it. Large masses only, under patriarchal, or rather absolute authority, could preserve the colossal civilization; for its perfection required a concentrated nation of slaves.

In this state of civilization we may, with remarkable clearness, perceive the importance of the confusion of tongues, and the absolute necessity of a chosen people, set apart to preserve a knowledge of the true God. The tendency of the patriarchal civilization was now, as it had been during the Adamic period, to "corrupt all flesh," and to make idolators of all mankind. Patriarchy, as people multiplied, while it operated powerfully on the common mind to produce servility, operated as powerfully on the mind of the patriarch to produce despotism. The concentration of immense power in the hands of an individual, as in Nimrod, makes of him a Jupiter Belus. The confusion of tongues very materially weakened patriarchal tendencies and powers; and was, probably, the first important deviation from the civilization of the Adamic period. But notwithstanding the blow it received by this measure, which was sufficient ultimately, in the progress of time, to destroy its evils; yet time was necessary for the human mind to gather energy, and to arrange itself in

positions for independent activity. During this time migrations in large compact masses would preserve and practise the patriarchal civilization; and, consequently, it would ultimately pervade the world if means were not provided to counteract it. For this purpose was Abraham called to set apart a people in whom should "all the families of the earth be blessed," by preserving a knowledge of the true God, until the time should arrive when the development of the human mind had progressed sufficiently to withstand infidelity by its own energies, and the history of prior events. Taking this view of these measures, they are precisely such as human wisdom, under the same circumstances, and having the same object to attain, would adopt, if the power and foresight of man were equal to them. We can see it now, having the facts before us; but nothing short of infinite wisdom could see it in the long vista of futurity which has transpired since the adoption of the measures.

From this point of civilization, as a general standard of the human mind in the earliest ages of sacred and profane history, the progression, the permanence, or the retrogression of the different species of men, may be easily and plainly traced. We have already noticed their distinguishing characteristics in regard to the other attributes; but those arts and sciences which more emphatically display causality, or the reasoning power,—the art of war, mathematics, and philosophy, were early characteristic traits, as well as poetry, statuary, painting, and architecture, which depend more upon genius and imagination, but not less upon reason than the

others. But we are not to suppose that the human mind remained perfectly stationary from the early patriarchal period down to that of engrafting patriarchal civilization upon the Greeks,—a period of about 1,500 years. No doubt some progress had been made in India, Chaldea, Phœnicia or Aramea (we include them together) and especially Egypt; but to what extent it is impossible to ascertain. Whatever was the improvement, however, it is certain that the prominent features remained the same, even in Egypt, after it became a Grecian and Roman colony.

Although the Chaldeans, Syrians, and Egyptians, were Hamo-Shemites as well as the Greeks; and truly great as they were in the civilization to which they were confined, by the nature of their patriarchal institutions, social and political, they were not the materials out of which the splendid Shemitic civilization was to proceed. Their whole machinery was too cumbersome, too colossal, too slavish. They would answer for types of Asia and Africa, but only for rudiments for Europe; and consequently were placed at convenient points to answer all the objects. But a people were to be found for Shemitic types, whose sexual relations were pure, whose religion was not symbolical, whose government was not patriarchal; and therefore whose minds were free, whose fancies were chaste and rich, whose genius was sublime and beautiful, and whose temperaments were strenuous and ardent, but discreet and penetrating. Therefore, while the plains of the Euphrates were sending out colonies to the important points in the interior of Asia, and on the Mediterra-

nean, to secure and spread patriarchal civilization, they also sent forth colonies to the north of Syria, to Asia Minor, and especially Greece, to lose all of their civilization that they might be prepared for the great destiny for which they were ordained. Admirably was the whole arrangement fulfilled! The concentrated wisdom of the world could not have made a better selection of materials, nor of the locations, than were made on the occasion. The Greeks were to be the types of the species, while the Cimmerians were kept in reserve, to be poured in from their northern hive, at a future time, to preserve Grecian civilization from being overwhelmed by the Ishmaelites, and to form a virgin mind to give new vigor to progressive development. Throw your eye over the history of the past, and if you cannot see the HAND which made this disposition to meet the wants, the contingencies, and the destinies of the different species of men, it will be worth another close and attentive perusal. See the Jews hastening into Canaan, to fulfil their appointed destiny! See the Phœnicians, their neighbors to the north, busily engaged carrying out the grand design! Look at the Egyptians, their neighbors in the south, where their Pharaohs are but instruments to accomplish it! Mark how diligently Sesostris chased the blue-eyed, fair-haired Syrian shepherds to the north of the Euxine, and settled a colony of Negroes at Colchis, probably to prevent their return, some 1,500 years before the Christian era; that they might proceed to found the great German hive for the future occasion which would require them, and achieve a far more important and glorious destiny than the possession of

Egypt. Now observe the Leleges, the Caucones, and the Pelasgians (we call them all Pelasgians, though Homer has separated them), arranging themselves into communities in Asia Minor and Greece, particularly southern Greece, which was afterwards called the Peloponnesus, and becoming Greeks after they received Cadmus from the Phœnicians, Cecrops and Danaus from the Egyptians, and Pelops from Phrygia. How admirably they located themselves to gain all the civilization of the past, without any hazard of undue influence to control the freedom of their minds and institutions. These are the great original types of the Shemites,—a people who eminently possessed all the requisites to represent the species in all succeeding ages.

"It has been already said," says Mitford, vol. I., p. 80, "as a remarkable circumstance in the history of Greece, that its oldest traditionary memorials relate, not to war and conquest, generally the only materials of the annals of barbarous ages, but to the invention or introduction of institutions of the first necessity to political society, and of arts even of the first necessity to human life." They began by the exercise of causality. Reason and good judgment laid at the foundation of their existence as a people; and although the period previous to the establishment of their philosophic schools may be called their poetic or heroic age, yet philosophy burst forth with such splendor at their commencement, that we know it must have been maturing for some time before. They imported the raw materials for science from the patriarchal civilized nations,—from Egypt, Phœnicia, Babylonia, and even India;—but they

quickly underwent a change by their penetration, their taste, their genius, which wove them into beautiful forms of science, and gave to them a beauty, substance, and texture, unknown to the places where they originated. The difference between the old and the new civilization immediately became strikingly apparent; for the spirit of free inquiry and closely critical investigation characterized the one, while the other was chained by the governments, and guarded by the priests. In the words of Heeren, "Researches on Ancient Greece," p. 311: "In the West the free spirit of criticism was developed, and in the East never." This important distinction prevailed in everything; in their sexual and political relations,—their poetry, history, arts, and sciences. Right or wrong the West required a reason for everything; while the East and South was, in a great degree, satisfied by tradition or authority. In short the contrasts of species were now first perfected, and the strenuous, callous, passive, and sluggish specific temperaments, became obviously apparent. From that time to this the separation has become wider and wider; as lines which diverge from the same point become more and more distant as they are extended. The two exceptions to this remark do not weaken its truth. That the Ishmaelites, after the overthrow of the Eastern Empire, received a short-lived impulse,—or rather became the depositaries of fugitive Shemitic knowledge they could not retain; and that the Canaanites universally and lamentably receded, as rapidly as the Shemites progressed, from Patriarchal civilization,

are exceptions which confirm, rather than contradict the remark.

What has been called the Dark Age, which succeeded the downfall of the Western Empire, was only a wholesome pause to admit the whole Shemitic family. From the conquest of Greece by the Romans, to the subversion of the Western Empire, over six hundred years, little had been done to enlarge the sphere of knowledge, but much to disseminate what was known. The tree which bore the fruit had arrived at perfection; decay had commenced, and a hurricane might sweep it away. The time had arrived to change the stock to one young, elastic, and vigorous; and the seed of such a one had been sown by Sesostris two thousand years before, when he chased the blue eyed, fair haired shepherds, and erected his columns of triumph on the threshold of Europe. We will hereafter see that the fruit was preserved, and improved in size and quality by the operation: but let us return again to the original stem which was the natural generator and type of the species.

It would be impossible within the outline we have prescribed for our limits, to give more than a profile view of the immense advantages enjoyed by the Shemitic family, by the infinitely judicious selection of the Peloponnesian Pelasgi, to be the first recipients of patriarchal civilization, as the types of the species. Of all other people they were precisely those whose previous preparation, whose vivacity, gaiety, imagination, taste, judgment,—in one word, whose genius—was admirably qualified to change the monotonous into the various,—the colossal, heavy

and sombre, into the light, airy, and cheerful,—and the stately and formal into the free and social. Besides, they had, more than any other known people, a kind of intuitive intellectual power,—a mode of leaping at the truth,—which enabled them to furnish the primitive forms, around which the future crystalizations of intellect were to form perfect and splendid gems. Such was their power, and such the strenuous temperament of this people, that, in about three hundred and fifty years, from Thales to Archimedes, they carried every branch of the arts and sciences to the utmost perfection it could attain, until the German genius and temperament were brought in to re-invigorate the apparently exhausted energies of the then civilized race—a period of about 1,000 years. And even now, when the intellect has the advantage of re-juvenility, a new dispensation, and a wider and more systematic range of power, we are constantly recurring to these singularly precocious people, and often indebted to them, not only for the principles of ascertained scientific facts, and scientific method, but for their happy speculations on subjects too much in advance of them to admit of demonstrable proof; as, for example, the Copernican System, founded on the theory of Pythagoras.

Poetry was the achievement of a previous period; but the art of war, eloquence, the several branches of philosophy, mathematics, sculpture, architecture, painting, criticism, history, &c., sprang up among them with a vigor, a luxuriance, and a beauty, indicating the fertility and congeniality of the soil into which the seeds had been cast. The progressive rapidity of the Shemitic species in the development

of causality, or the reasoning power, is in nothing made more manifest than in the art of war; a game at which the East had been playing, with deep interest, for centuries before the West had an existence; and, therefore, it is to be presumed, an art in which they had developed more than in any other. But, with the learned and sagacious Heeren, we are compelled to "admire that political superiority, which the nations of this small region, just emerging from savage life, immediately established over the extensive countries of the large continents. The East has seen powerful conquerors; but it was only in Europe that generals appeared, who invented a science of war really worthy of the name. Hardly had a kingdom in Macedonia of limited extent outgrown its childhood, before Macedonians ruled on the Indus as on the Nile. The imperial city was the heiress of the imperial nation; Asia and Africa adored the Cæsars. Even in the centuries of the middle age, when the intellectual superiority of the Europeans seemed to have sunk, the nations of the East attempted to subjugate them in vain. The Mongolians advanced into Silesia; nothing but the wastes of Russia long remained in their power: the Arabs desired to overrun the West; the sword of Charles Martel compelled them to rest contented with a part of Spain; and the chivalrous Frank, under the banner of the cross, soon bade them defiance in their own home."—Researches on Ancient Greece, "Preliminary Remarks," pp. 2, 3.

But the progress made by the Shemites in war and politics, was not in reality more rapid than it was in all the other less obtrusive branches of human sci-

ence. Socrates, Plato, Demosthenes, Euclid, Aristotle, Archimedes, and hosts of others whose names have been the pride and delight of succeeding ages, attest the truth of the observation. That they resorted to Egypt, Syria, Chaldea, and India, for knowledge, is freely acknowledged; but, as we have before said, it was only to obtain the raw material, to be by them converted into valuable and useful articles; as the bee collects materials from every flower, without regard to color or quality, which are afterwards elaborated into wax and honey. This eagerness for the rude elements of knowledge, the money and labor expended in obtaining it, and the industry manifested in arranging, extending, and beautifying it, exhibit the Shemitic strenuous temperament, at this very early period, in strong contrast with the other species; a contrast which has continued to the present moment with increased intensity. Where is the country which will not be visited,—where the obstacles which will not be overcome,—where the dangers which will not be braved, by the Shemitic species to obtain knowledge? Not by an individual only, as an exception to the mass of his species, but as a general principle applicable to thousands. No dark race has at any time exhibited this appetite for knowledge. We know of two Ishmaelites who visited China in the 9th century of our era; of several who visited their countrymen in Africa, and of several who visited the interior of Asia, who have published their travels; and recently a professor of Egypt who visited Paris. So rare are the instances of any of the dark races visiting foreign countries for information, that they scarcely amount to an ex-

ception to a general assertion that such a labor is never performed by them; and, if we except a few Ishmaelites it is literally true. The callous, the passive, and the sluggish temperaments, in general, are only excited by sensible objects.

We think it unnecessary to follow the development of causality in the Shemitic species, through the Romans, the dark age, to the present Baconian period, when the mind is brought back from the regions of hypercriticism, syllogism, and sophism, to causes and effects,—the empire of Nature; because what we have already said, when treating of the other attributes, will give our views of these periods. But we cannot pass over, in silence, the immense advantages obtained by the Shemitic family, by the introduction of the northern barbarians of the great German family. The ancient world of Greece and Rome, and the civilization they enjoyed, although essentially different from the patriarchal world and the civilization of Asia and Africa, retained some features opposed to a continually progressive development of mind. There was literally then no country. Cities were everything, for they swallowed up the country. Athens was the world before Rome superseded her. Nay, we may say that Rome was Athens removed to Italy, because the civilization of Rome was that of Athens in a general sense. From the absolute preponderance of power of these people, and the pride it engendered, there was not only a similarity, but an identity of the development of the human mind, which pervaded the whole of Europe that was not barbarous. There was no civilization beyond the influence of Rome; and where-

ever her influence prevailed, she stamped her civilization. Cities not only swallowed up the country, but they swallowed their own citizens. As has been remarked by M. Guizot, individual liberty "was unknown among the Romans, it was unknown in the christian church, it was unknown in nearly all the civilizations of antiquity. The liberty which we meet with in ancient civilizations is political liberty; it is the liberty of the citizen. It was not about his personal liberty a man troubled himself, it was about his liberty as a citizen. He formed part of an Association, and to this he was devoted." The human mind was everywhere only an impression, more or less perfect, of the Roman stereotype of Greece; and we may assert it as a universal truth, to which there are no exceptions in the history of mankind, that a sameness or identity, soon becomes stagnant, and then feculent. The Greeks, brilliant as they were, soon became exhausted from this cause; for, before they became a Roman colony, they descended from physics to metaphysics, and from these to syllogisms and sophisms;—in short, from the sublimity of science to the pedantry of words.

As with the physical, so with the mental world. The German peculiarity of mind was precisely what the ancient mind required to perfect it. These barbarians possessed psychical elements which were different from the ancients, and which were necessary to keep up that constant agitation necessary to health, vigor, and progress. When they broke down Grecian and Roman civilization it was not to destroy, but to rebuild upon a new foundation, a new civilization, out of such of the old materials as were

suitable to the new construction, and the new materials required for its perfection. Individuality and personal liberty were not the only, nor the most important materials they brought with them; nor was it that they gave to agriculture,—to the country,—a life it had not before. These were, undoubtedly, of vast importance; but they were the fruits of a higher principle,—a principle of deep and close investigation, which took nothing for granted, but questioned everything, and which generated, and secured their personal liberty;—a comprehensiveness of mind which made them investigate for themselves, and made them averse to taking things upon authority. In short, they had the original Greek mind, more practical, and therefore necessarily less poetical, less brilliant, and, consequently, of slower development, but ultimately more substantial. We say, of slower development; and, yet, if we reckon from Homer to Thales for the Grecian,—and from the last influx of the barbarians to Roger Bacon, the difference will be rather in favor of the Germans. Indeed, if we divest ourselves of educational prepossessions we think the Germans might be advantageously compared with the Greeks, in the astonishing rapidity of mental development. Giving to the Greeks the full advantage of their most illustrious period—from Thales to Archimedes—and taking German development from Roger to Lord Bacon, a period of about equal length,—if the Grecian galaxy exceeds in splendor, the German more certainly excels in usefulness and power. The Grecian mind arrived at its highest perfection in the period mentioned; and the German mind in the parallel period named, al-

though not inferior in rapidity of development, was only preparing itself for a progress to power and splendor far exceeding anything achieved by the ancients.

The Germans, it is true, had the advantage of the developments of Grecian mind, as these last had of the patriarchs; but had not the Romans, and the later Greeks, also the same advantage? And why did they become comparatively stationary, with the same materials that enabled the Germans rapidly to progress? Because they wanted the peculiar cast of mind possessed by the Germans;—because the race required to be crossed with the German stock, to acquire a re-invigoration of mental constitution. It is highly probable both families were improved by the cross; yet the great features of the German mind were as distinctly preserved in the new race, as the principles of their social regulations, and the features of their languages were preserved in the new institutions and languages.

None of the attributes exhibits the different species of men in stronger contrasts than causality. The Ishmaelites, anterior to the birth of Mohammed, had advantages superior to the Germans, and at all times had advantages equal to the Greeks. Placed between Babylon and Egypt, and between India and Thebes, with Syria and Canaan on the north;—being the channel of communication between India and the nations on the Mediterranean, until Vasco De Gama discovered the passage by the Cape of Good Hope; and being among the first to receive the Gospel,—it would be natural to suppose that prior to the birth of Mohammed they would exhibit

mental cultivation equal to any other people. It was not realized. But especially after the successes of Mohammed, the establishment of the Caliphats, the subversion of the Eastern Empire, and the conquest of Spain; when Bagdad and Cordova became places of refuge for most of the learning of the age; when the fury of conquest was arrested or satiated, and the Caliphs became prodigal to learning, and infused the same spirit into every subordinate court throughout their extensive dominions; when colleges and other seminaries, liberally and even prodigally endowed, were located in every town; it certainly might then have been expected that some progress would be made, commensurate with their advantages and apparent exertions. They were masters of every seat of learning, ancient and modern, from Spain to the utmost confines of Persia; including Greece, Asia Minor, Syria, Assyria, Palestine, Egypt, Arabia, Babylonia, &c., consolidated into an Empire tranquil, rich, and powerful: while the Shemites were overwhelmed by an inundation of ignorance from the north—in chaos and strife by the raw and unsettled elements which had been cast among them—harassed by inroads by the Ishmaelites—their learning torn from them, carried into Asia, burned, or scattered into secret and bye places; —yet who requires to be told that even before these violences and storms had subsided, notwithstanding all the advantages of the Ishmaelites, the attribute of causality was developed by the Shemites in a higher degree than it was among the Ishmaelites when in the zenith of their glory, in literature, arts, and sciences?

We have heretofore had occasion to remark, when considering another attribute, that although the contrast was remarkably strong between the Shemites, and all of the dark races, yet that the Ishmaelites and Japhethites frequently approach each other so closely, that a contrast between them, upon general principles, is a subject of difficulty. It is so in regard to causality. If we survey the great works of the Chinese, who are the types of the species, their great wall and canal, we behold in them nothing but copies of the patriarchal civilization, which we have seen at Babylon, Nineveh, and in Egypt. The great wall, in its whole construction, arrangement, and construction of its towers, reminds us of the walls surrounding Babylon, Nineveh, and other cities of the patriarchal period and region. The wall and canal are far more extensive undertakings,—far more vast and laborious, than any similar work of the patriarchal age; but, it is probable, the people were more numerous, equally condensed, and equally enslaved. The mere extent and immense labor of these works do not give to them a character in advance of patriarchal civilization; for there is no art or science displayed in their conception or construction, to give them a higher character. One remarkable circumstance is made apparent by these great works, which marks the progress of civilization by these singular people to be in advance, as to time, of every other people, in one of its most important elements. We have seen that in all the ancient civilizations, from the earliest patriarchal period down to the establishment of the Germans upon the ruins of the Roman Empire, cities were everything, and the

country comparatively nothing. Walls were built about cities; lakes and canals were built for the use of cities; but with the single exception of canals for irrigation in Egypt, no walls, canals, or lakes had been constructed for the country, because ancient civilization had none, in the sense now understood by the word. The Japhethites, it is evident, had a country; for they built a wall to protect, and a canal to drain, and irrigate it. It is worthy of notice also that the fact of possessing a country does not necessarily confer upon the people that peculiar individuality,—that personal identity,—which we noticed as a peculiar and important characteristic of the Germans. The constitutional temperament of the Germans gave to them their personal identity, and this gave to Europe a country as well as cities; but the constitutional temperament of the Japhethites converted a whole country into a city, in respect to the civilization it induced. We thus perceive that the same thing, operating upon different species, produces different results.

But to return to our subject. We discover nothing in the great works of the Chinese to exhibit a development of causality beyond the patriarchal age; and therefore regard them as items of no importance in our proposed investigation of this attribute. Nor will we look to their jurisprudence as an item of any importance in this inquiry; for although it displays much perfection in many of its departments,—a prolix particularity opposed to the summary generalities of the Ishmaelites,—yet it evidently grew out of their passive natures as naturally, and with as little aid from the mind, as the short code of the Ishmaelites spon-

taneously grew out of theirs. They claim for themselves only the credit of conforming to the ancient laws and customs of their patriarchs; and the whole character and nature of their code,—its minute particularity, reaching even to shades of domestic conduct,—show it to have been founded in their patriarchal period, and to have grown to its present bulk and form with the growth of population and the development of their passive character. Instead of exhibiting causality in their formation, the whole tendency of their laws and institutions is to suppress it, and make the people conform to experience, to old customs,—"the converting maxims of the ancient kings."

Nor is it in their voluminous literature that we are to look for a development of causality; for in this we shall find no theories, no speculations, no investigations, beyond the limits of their formularies. Besides their numerous commentaries on the text of Confucius and his immediate disciples; and besides what may be called their belles lettres, their plays, romances, &c., which all appear to be cast in the same mould, they have numerous artistic and scientific works, which exhibit the same minute attention to particulars, and the same absence of causality.

"After a curious analysis of the great Chinese work on Materia Medica, which, although its name *Pun-tsaou* might literally imply that it was merely an *herbal* or history of plants, is in fact a classification of the chief productions of nature in the animal, vegetable, and mineral kingdoms, M. Rémusat comes to the following conclusions: 'I think that we may infer that natural history has engaged the attention of the Chinese from the remotest antiquity, and that it became in consequence a pursuit among neighboring nations, which caused it to make some progress. . . . All that could be learned from *mere superficial inspection* they have observed and recorded: all that *demanded reflection or delicate research* they have remained ignorant of or misapprehended. Superficial, however, as are the ideas they have collected, they constitute a scientific whole, which derives some

value from the method to which it has been subjected." Davis's History of China, vol. II., p. 298.

Causality among the Japhethites may be called *resilient*, in opposition to that which is *inductive*. Effects, with them, are the chief objects of attention, and these are only estimated in proportion to their utility. Causes are never investigated, if the results can be produced without knowing them. Consequently, numerous as are the facts with which they are acquainted, in all departments of human knowledge, they are strangely deficient in a knowledge of the natural laws applicable to them, or any mode of erecting a science which would lead to the discovery of new facts by the operations of the mind.

We must, therefore, look for the development of causality among them in their arts and manufactures. Here, too, we are met with a difficulty; for we cannot know what to credit to the power of the mind, what to accidental discovery, and what to other people with whom they may have had intercourse.

"The constitutional ingenuity and industry of the people has led them to fall upon various practical results, in spite, as it would seem, of a feature in their character and habits which is opposed to the progress of knowledge. They profess to set no value on *abstract* science, apart from some obvious and immediate end of utility. Among ourselves, the practical *application* of scientific discoveries is sometimes long subsequent to the discoveries themselves, which might, perhaps, never have been made, had not science been followed up through its bye-paths for its own sake merely, or with a very remote view to utility in practice. The Chinese always estimate such matters by their immediate and apparent *cui bono*. Dr. Abeel relates, that after satisfying a mandarin in reply to his questions concerning some of our useful manufactures, he took occasion to mention that we had metals, which on coming in contact with water, burst into flame. I had some potassium with me, (he adds) and was desirous of showing its properties to him. He immediately inquired concerning its *uses*, and when these could not be very satisfactorily explained to him, looked too contemptuously to induce me to venture an experiment.

"A surprising enumeration might be mode of instances in which the Chinese appear to have stumbled, by mere chance, upon useful inventions, without the previous possession of any scientific clew.

Cases, however, occur in which it may be fairly suspected that they were indebted to European missionaries. Without knowing anything, for instance, of that theory of optics which treats of the convergence, or divergence of rays of light by lenses of different shapes, they use both convex and concave glasses, or rather crystals, to assist their sight."

Although, therefore, it is evident that general causality is not, by any means, a prominent trait of Japhethic character, yet they must not be supposed to be deficient in causality of every kind. If we should even suppose that all of their numerous discoveries in the arts and manufactures were produced by accident, yet there must have been a high degree of mechanical causality to produce the state of things necessary to bring about the accidental discovery. Mr. Davis, in the paragraph quoted, calls it "ingenuity and industry;" and, perhaps, if restricted to artistical or mechanical causality, in contradistinction to scientific, the word ingenuity may be as expressive as any that can be used; because it signifies an innate power or aptitude for a special purpose, which designates particularly the passive temperament which distinguishes the people; and because by excluding abstract or general ingenuity, which generalizes, theorizes, and speculates,—powers which this people have never manifested,—it will exhibit the true power and kind of their causality. Mechanical ingenuity is compatible with that narrower sphere of causality which is confined to an aptitude to trace secondary or immediate causes to their results in single objects, isolated from the general mass; while, in its general or comprehensive sense, ingenuity signifies a general ability to methodize causes, relations, and effects of many or various objects, as a combined whole. By far the greater

number of useful discoveries made among us are produced by men of mere mechanical ingenuity; men who from the texture of their minds, may be supposed to be incapable of any great general mental powers, but who have a peculiar aptitude for particular branches of mechanics. Causality they possess in a high degree, in the particular matter to which it is directed by their genius; but out of this direction they may not be distinguished for any extraordinary powers.

A people who discovered the uses of the silk worm, —the art of raising or propagating them,—of managing and reeling the cocoons; of spinning the silk, and weaving it into the beautiful fabric so much, so long, and so deservedly admired; who discovered the art of making the beautiful and serviceable porcelain, of which they were so long the sole manufacturers; who discovered the polarity of the needle, the art of printing, of making paper, gunpowder, &c.,—must have a high degree of some kind of causality, although they know nothing of the general scientific principles upon which any of these things depend. They may not, like Sir Humphrey Davy, discover a safety lamp by abstract philosophical reasoning; but in the multitudinous and multiform operations of these industrious and observant people the discovery may be made, or something analogous may lead to the discovery, without any pretensions to the abstract powers and scientific attainments of the philosopher.

We perceive, therefore, that the Japhethites at least equal, if they do not excel the Shemites, in that humble, but not less useful for being humble,

kind of causality, which we have denominated mechanical ingenuity; and, consequently, that they excel the Ishmaelites by many degrees in this respect. But it is also apparent that they compare unfavorably even with the Ishmaelites, in abstract or scientific causality.

In conclusion of the subject, we remark that the Shemites combine all the powers of causality in a higher degree than any other species, as the result of their strenuous temperament; and, consequently, that they have made a greater progress from patriarchal civilization and mental development than any other species. That the Ishmaelites combine all the powers of causality in an inferior degree compared with the Shemites, but in a higher degree than the other species, by reason of their callous temperament; and, consequently, although they have departed in many respects from the patriarchal civilization, they have not, in general, made any important progress from the patriarchal standard. That the Japhethites, although they have abandoned the colossal architecture of the patriarchs, have essentially preserved the general features and texture of their civilization, and, by reason of their passive temperaments, are inferior to the Shemites and Ishmaelites, in the general or abstract powers of causality, but equal to the Shemites, and superior to the other species, in mechanical and manufacturing ingenuity,—or that degree of causality which is indifferent to, or regardless of, causes beyond their immediate practical utility: consequently that they have progressed, as it were, in almost a straight line from the ancient standard of civilization.

We say nothing of the Canaanites on the subject of this attribute, because they have receded so far, and they sank so rapidly from the patriarchal standard, that they have preserved nothing for a comparison but the extremity to which they have sunk. The strenuous temperament of the Shemites has placed them as far above the two middle species, as the sluggish temperament of the Canaanites has placed them below them.

We have thus endeavored to follow the progress of development of the different species of men as briefly as we possibly could, consistent with a clear exposition of the different subjects. It will be evident to our readers that we have barely touched upon the several topics, sufficiently to give a clear view of them,—or rather fairly to open them to view. Our limits would admit of no more. We were therefore compelled to condense, contrary to our inclination. Yet we think we have been sufficiently explicit to authorize the conclusion that the different races of men are of distinct species.

Dr. Prichard, in his "Natural History of Man," p. 64, et seq., says that "psychological" characteristics are evidences of specific differences, as well as external figure, color, anatomy, or physiology; and he has devoted three or four sections or chapters, to prove that all the races of men have identical psychological characteristics, which we will presently briefly examine. We agree with him in the importance of mental attributes to determine species: and may we not, without presumption, ask of our readers, if we have not proved that the whole mental character of each species, contrasts with every other

species, from the earliest record of them, as strongly as they do at the present day? And do they not all differ from each other in their psychical attributes, as widely as the dog, the fox, the wolf, and the hyena differ in instinct from each other? May we not also confidently ask if we have not done equal justice to each species without fear, favor, or affection? And may we not also ask, if the irresistible conclusion from the whole is not, that there are at least four distinct species of men, if "psychological characteristics" distinguish species?

But Dr. Prichard, from the same mental characteristics, has arrived at a directly opposite conclusion. It is proper, therefore, to examine the process by which he arrived at so different a result, for both of us cannot be right.

In his "Natural History of Man," p. 486, sect. 50, is the introduction to a series of sections, entitled a "Comparison of Human Races with respect to Mental Endowments."

"There is one point of view," says he, "in which it still remains for us to compare the different tribes of the human family, that is, with regard to mental endowments."

"Psychology is," he continues, "with respect to mankind, the history of the mental faculties; it comprehends, likewise, an account of those properties in the different races of animals which most nearly resemble the mental endowments of man. (?) It has been observed, in the preliminary part of this work, that the instincts of one tribe of animals are not those of another; that no two separate species resemble each other precisely in their habits of life, tendencies to action, manner of existence, or in the internal principles of feeling, appetency, and aversion, of which the actions and habits are the outward signs and manifestations. If, now, it should appear, on inquiry, that *one common mind, or psychical nature, belongs to the whole human family*, a very strong argument would thence arise, on the ground of analogy, for the community of species and origin."

From the title of the section, as well as the two paragraphs quoted, stating the things to be proved, it

was natural to expect from the learned author, a detailed comparison of the mental endowments of the different races, in some form necessary to enable the reader to judge of their comparative mental endowments; or that they had "one common mind, or psychical nature." We confess that such was our expectation, when we eagerly commenced the section, and were proportionably disappointed when we found no such thing was designed. In the progress of this introductory chapter, we were surprised to find the learned author, change the subject of his investigation from the proposed comparison of "the different tribes of the human family" "with regard to mental endowments," to a comparison of "the psychology of human races" "with the diversified instincts of the lower species" of animals. "If," says he, pp. 462, 3, "it should appear, after a full investigation of these phenomena, that there are leading principles in the psychology of the human races which, in their most important relations, stand in correspondence with the diversified instincts of the lower species, and, moreover, that these leading principles are common to all human races, a strong argument, as we before observed, is plainly deducible in favor of the common origin of mankind." Our expectation of pleasure and profit in this important part of his subject, was much abated upon reading this paragraph. It changed the proposed psychological comparison of the different tribes of men to a psychological comparison of man "with the diversified instincts of the lower species" of animals; which instincts, in a former section, he called "psychological characteristics." Little could be expected

from such a comparison to illustrate the "Natural History of Man;" yet, as "these leading principles" in which men "stand in correspondence with the diversified instincts" of animals, he informed us "are common to all human races," something valuable might be gleaned.

Our hopes were again elevated, however, when, as if recurring to the original proposition with which he opened the section, though restricted in the proposed extent of inquiry, he informs us, p. 493 :—

"I shall now endeavor to pursue this line of inquiry, and to illustrate the psychological history of the most widely separated races of men. This object may be attained by collecting, in the first place, the most striking and characteristic particulars relating to the moral and intellectual state of such tribes, of their original superstitions or religious dogmas in times when they were as yet cut off from participation in the common acquirements of the civilized and christianized world; and, secondly, by showing how far such races have been found capable of receiving and appropriating the blessings of civilization and Christianity when they were introduced among them."

We now supposed that we had actually obtained what the author, after deliberate thought, proposed to investigate in the succeeding sections; viz.: First—"The most striking and characteristic particulars relating" to their moral state: Secondly—The same particulars relating to their intellectual state: Thirdly—"Their original superstitions or religious dogmas," &c.: And lastly—"Their capability of being civilized and christianized" by competent exertions.

This, although restricted to "the psychological history of the most widely separated races of men," instead of "the different tribes of the human family," as was at first proposed, was nevertheless sufficiently comprehensive to answer the purpose; for if he could make it appear that the morals, intel-

lect, religious superstitions, and capability of being civilized and christianized, of the American savages, and the still more debased Negroes of Africa, are, in their "leading principles common to all human races," and particularly Europeans, we acknowledge his object would be accomplished. If the extremes were alike,—were of the same "common mind or psychical nature,"—it might be assumed with propriety, from analogy, that the middle was also alike. The subjects proposed for investigation were, therefore, sufficient in extent and variety to cover the whole ground.

We therefore turned to section 51, entitled "Psychological View of the Native Races of America," with renewed interest,—but again to be disappointed; for he again abandoned the subjects he proposed, particularly "the moral and intellectual" comparisons, and throughout the 51st, 52d, and 53d sections, confined himself exclusively to proofs that the American Indians, and African nations, had some kind of religion, and were all, in some degree, capable of being civilized and christianized, by the indefatigable labors of missionaries. From such premises the conclusion would be perfectly logical that the principle of religion was common to all mankind, and that it is possible to convert some of every race to Christianity. If the learned author had been contented with this just conclusion from his detailed proofs, which fall infinitely short of supporting any of the positions he proposed in his introductory section, we would assent to his conclusion, without saying anything of the want of logical precision in the statement and proofs. But he was not so con-

tented; for from these two simple facts, in their most naked form, after averring that they, "in their most important relations, stand in correspondence with the diversified instincts of the lower species" of animals (p. 492)—that is, were equivalent to instincts—he comes to the following sweeping conclusion, viz.:

"We contemplate among all the diversified tribes, who are endowed with reason and speech, the same internal feelings, appetencies, and aversions; the same inward convictions, the same sentiments of subjection to invisible powers, and, more or less fully developed, of accountableness or responsibility to unseen avengers of wrong, and agents of retributive justice, from whose tribunal men cannot, even by death, escape. We find everywhere the same susceptibility, though not always in the same degree of forwardness or ripeness of improvement, of admitting the cultivation of these universal endowments, of opening the eyes of the mind to the more clear and luminous views which Christianity unfolds, of becoming moulded to the institutions of religion and of civilized life: *in a word the same inward and mental nature is to be recognised in all the races of men.* When we compare this fact with the observations which have been heretofore fully established as to the specific instincts and separate psychical endowments of all the distinct tribes of sentient beings in the universe, we are entitled to draw confidently the conclusion *that all human races are of one species and one family.*" pp. 545, 546.

The conclusion is so evidently unsupported by the proofs, that it requires no farther consideration.

CHAPTER XII.

THE HISTORY OF WOMAN IS A NECESSARY AND IMPORTANT ITEM IN THE NATURAL HISTORY OF MAN.

Women are one half of mankind. If man, by reason of his masculine, physical, and spiritual powers, occupies the foreground in the transactions of the world, woman by reason of her spirituality, is the secret cause to produce those transactions. If female influence is passive rather than active, it is not the less powerful. But it is both active and passive. Active in the congenital temperaments of children, as well as all of their early training, and in their influence to soften the domestic, or social asperities of men; and passive in those powerful influences they possess, by their relying and feminine qualities, to awaken the sympathies, and call into activity the highest energies of man. The law of the relation of the sexes is more deeply engraven upon human nature than any other; because, whatever theories may be adopted in regard to the origin of society, languages, &c., no doubt can be entertained, that the influence of woman must have been anterior to any improvements of the original condition of man. Consequently, it was antecedent and superior to education and government. That these relations were powerfully instrumental, in the origin of development, to give it a direction and character ac-

cording to the natures operating and operated upon cannot be doubted by any one who has paid the slightest attention to domestic influences, from and under which patriarchal education, customs, and government commenced. It is not pretended that these influences could confine the progress of development within any precise limits; but to give it a general impulse and character, in conformity with constitutional temperament, which would accompany it, and may be detected, whatever modifying influences have operated to disguise them.

If the influence of woman is of this importance; —and if this influence is of more or less importance according to the natures of those who exercise it, and upon whom it is exercised, the condition of women among the different races of men, must be of the highest consequence to determine specific character, as well as to give a correct view of the natural history of man.

The animal kingdom would abundantly furnish us with examples, by which to prove, from analogy, that specific character determines sexual relations. But although, in this instance, it would be a legitimate mode of reasoning, to a certain extent, yet animal analogies have been so abundantly and indiscreetly used by others, that we omit them, to avoid the suspicion of having formed any of our opinions upon them.

Man has the advantage of woman in physical power, and some mental modifications which depend upon the peculiar physical organization, and functional powers which constitute male and female. But these advantages in the male are balanced

by those of another kind possessed by the female, which place her fully upon a par with him in all communities where justice prevails over brute force, and a polite taste over brutal instinct. Man, by his superior strength, has the power of tyrannizing over woman; but such tyranny is never exercised without inflicting a severe retribution upon those who exercise it. Women who are slaves can only be the mothers of slaves. 'Like begets like,' is one of the few laws of nature applicable to organisms universally. No people have ever exhibited any considerable advance in arts, sciences, and civilization, whose treatment of women has been cruel and oppressive. Nay, the gradations of advancement, or of degradation, in everything which constitutes the glory of man, may be traced, step by step, by the treatment of women, among a people. From the brutal New Hollander who secures his wife by knocking her down with a club and dragging the prize to his cave, to the polished European who fearfully, but respectfully and assiduously, spends a probation of months or years, for his better half, the ascent may be traced with unfailing accuracy and precision.

Although there are gradations of degrees among the dark races, in their sexual relations, yet the contrast only becomes vividly strong when they are compared with the Shemitic species. It is impossible to conceive how such uniform results, which prevail universally, without an exception, should arise by chance among the most important beings of God's creation, while all animals are remarkably uniform in the relations of male and female in the same spe-

cies. That man should regard woman as his slave, in a worse sense than he does any other being under his authority, so contrary to all analogy with every other creature, is one of the remarkable instances of God's providence in the Government of human beings, more mysterious than many others which have caused so much scepticism. There is nothing which so much shocks the philanthropic heart as to look abroad upon the people of the earth, and see hundreds of millions of the race shut up in seraglios, zenanahs, and other prisons; or made beasts of burden, and beasts of brutal passions, holding life by the slender tenure of the forbearance of each capricious tyrant;—deprived of any liberty of free will, even in affairs of the heart, and annually immolated by thousands to the Moloch of jealousy, fear, or a false notion of glory and posthumous honor!! And these beings, so treated, are kindred flesh and blood of their tyrants;—their mothers, their wives, and their daughters!!! When we hear of a race of men being subjected to the tyranny of another race, either by personal bondage, or the more easy condition of tribute, our sympathies are enlisted in their favor, and our constant good wishes, if not our efforts, accompany them. But when we hear of hundreds of millions of the truest and most tender hearted of human creatures being trodden down, and trampled upon, in every thing dear to the human heart, our sympathies, which are so freely expended on slighter occasions or imaginary evils, are scarcely awakened to their crushing woes.

If there is any one principle of human nature, which, from any analogy we can infer from animals,

we might suppose to be universal among all the species of men, we should suppose a uniform treatment of wives, mothers, and daughters would be that principle. If all men, everywhere, should make them the idols of their affections,—or rather, if all the species of men should treat them alike, it might be some foundation for an argument in favor of the unity of the species. But to tell us that the Turk, the Hindoo, the Chinese, the Negroes of Africa and New Holland, are all brothers of one another and of the European,—that we are all of one species, but of different educations,—makes our blood boil for our sisters in captivity, until we feel willing to go on a crusade of chivalry to exterminate our worthless relations, for their cruelty, oppression, and want of gallant feeling. We would commence first with the Turks, because they actually shut up our own beautiful Caucasian sisters, and would inflict upon them the law of retaliation, until not a male relation of them was left at liberty to profane the name of brother, and to perpetrate the horrors of their domestic tyranny. Brothers indeed! We venerate the benevolence which calls upon our sympathies by the endearing appellation; and we are truly sorry that there are so many facts, in their natures and histories, to disprove the relationship: but the difference was made by Him who knows, better than we do, the design of the specific distinctions; and we have made very little progress in counteracting that design, although we have for years extended to them the hand of relationship, which they have as perseveringly rejected with disdain. Who knows that our efforts to civilize and christianize the world

have not failed from our supposition that all men are of one species, and that the differences arise from education? Our benevolence has tried so long to effect these objects upon this supposition, without success, it might be worth the trial of an effort on the contrary supposition, that there are distinct species, and, therefore, that all men are not capable of learning the same things in the same way. It may be a mistake to suppose that because we have advanced in the sciences, arts, civilization, and Christianity, by a certain method, all mankind must be taught in the same way. It may be equally a mistake to suppose, that we must commence our instructions with all men, precisely at the point where we have left off, without the necessary preparatory measures to insure success. The farmer who cultivates a field overgrown with briers, by merely plowing it, sowing the seed, and harrowing it, might, with equal propriety, expect a fine field of wheat at harvest, as he who cultivates the moral and intellectual world after the same plan, and yet hopes to reap an increase of some thirty, sixty, or an hundred fold. It may be equally a mistake to suppose that because a large majority of mankind are of a different species from us, and obstinately persevere in darkness, notwithstanding our efforts and example to enlighten them, therefore they are incapable of high civil and religious improvement, if the proper means were adopted in regard to them.

We have said that if there were any one principle which, more than any other, would point to the specific distinctions in the races of men, we should suppose that principle to be the relations between

male and female. All men might not be of the same species if these relations were uniform among them; because in every kind of horse, in every kind of deer, &c., these relations are the same for anything we know to the contrary. Indeed, a great uniformity appears to prevail throughout animated nature, in this respect, except with man: or we may say that man exhibits a greater departure from such uniformity, than any species of animals.

It is not, however, in the present condition of the women in the Shemitic species, that we are to make our inferences in regard to the specific distinctions of men, as manifested by their conduct to women. It is true that the present condition of women among all of the Shemitic nations, as contrasted with their present condition in the several dark races, must have arisen from causes which must be sought for in the specific constitutional temperaments of each people, and are, therefore, evidences of a disparity in this respect; but if we should confine our remarks to present conditions, it might be thought that education, or some influences other than specific differences, had produced the distinctions. The question we propose for consideration is, whether these differences have their origins in specific distinctions, or are the results of education, or other influences. To arrive at a reasonable certainty on this subject, we must refer to the different species of men at the earliest possible period, anterior to education, as perfectly as this can be done. We must also remember, what the history of the Shemites proves to be true, but what the history of the dark races does not corroborate, that savageism and igno-

rance oppress, and civilization and education ameliorate the condition of women. We say that the history of the dark races does not corroborate this important circumstance; because it is notorious that their arbitrary and tyrannical regulations relating to females have increased in stringency with their progress in time, if not in civilization. This fact is, in itself, a powerful proof of specific difference. But we waive the advantage, and will admit, for the present, the general truth of the assertion. Nor will the admission embarrass the subject as much as might be apprehended on first sight; because the dark races have remained comparatively stationary, in manners, habits, customs, and civil institutions, since the earliest historic period. Mohammedanism made some changes among the Ishmaelites, and produced some effects upon other species, the evils of which are yet perceptible. The Spaniards have not yet wiped out the stain of Saracen blood from their constitutions; and the Moorish manners and habits will continue with them until their constitutional temperaments shall have been purged of the impurity. The Hindoos have also been corrupted by them, at least in regard to the treatment of women; unless zenanahs should be regarded as ameliorations of the evils they suffered before their introduction. The Canaanites on the borders of the Sahara Desert have also been modified by them. With these exceptions very little change has taken place among the dark races since the earliest period; and these changes produced very little effect upon the general manners, habits, and customs of the people. Consequently they will have the advan-

tage of the Shemitic family in the comparison we are about to make, because they had the advantage of a higher degree of education and civilization.

We will not discuss details of national differences in the male and female relations, in nations of the same species. This belongs to the history of the varieties of the same species, and not to our general elementary treatise. The general principle, applicable to the whole of a species, whether founded upon specific constitutional temperaments, or the results of education and civilization, is the subject for examination.

In the examples to which we will refer, we will omit the Israelites and neighboring nations. An objection might be made to the Israelites, because they were a chosen people; and, strange as it may appear, the Jews are not the most favorable example for the honor of the Shemitic race, in this respect, that can be found. On the contrary, the Gentiles, the collateral branches of this family, exhibit much greater purity than the lineal descendants of Shem. These lineal descendants were corrupted by the evil example which surrounded them, as they had been frequently in other matters. We also omit the Greeks and Romans, not because they would not furnish examples for our purpose; but because, from the familiarity of the mind with their more polished condition, it might be somewhat difficult, for the general reader, to separate the ideas already formed of them from their classics, and think of them as they were before any general cultivation made them the refined people of the world. It is true the Greeks, before the Persian invasion, and before they

became tinctured with Asiatic manners, could be resorted to with propriety. The contrasts between them and the Ishmaelites were at all times sufficiently strong to illustrate the Shemitic character of the people. Heeren, in the preliminary remarks in his "Researches on Ancient Greece," speaking of the difference between the people of Asia and of Greece, makes the following remark: "But can we derive from this physical difference, those moral advantages, which were produced by the better regulation of domestic society? With this begins, in some measure, the history of the first culture of our continent; tradition has not forgotten to tell, how the founder of the oldest colony among the savage inhabitants, was also the founder of regular marriages; and who has not learned of Tacitus the holy usage of our German ancestors? Is it merely the character of the climate, which causes both sexes to ripen more gradually, and at the same time more nearly simultaneously, and a cooler blood to flow in the veins of man; or is a more delicate sentiment impressed upon the European, a higher moral nobility, which determines the relations of the two sexes? Be this as it may, who does not perceive the decisive importance of the fact? Does not the wall of division which separates the inhabitants of the East from those of the West, repose chiefly on this basis? And can it be doubted, that this better domestic institution was essential to the progress of our political institutions? For we say confidently, no nation, where polygamy was established, has ever obtained a free and well ordered government."

The earliest traditions of the Greeks relate not to

wars and conquests, but to the settlement of their domestic institutions and sexual relations; as if they were then putting off the weights and fetters with which they were bound in Asia, under the patriarchs, preparatory to starting in the great race of civilization, to which they were assigned.

Herodotus mentions a circumstance which strikingly contrasts the Greeks and the Persians. The cause and origin of the Persian hostility to Greece, was the conquest and destruction of Troy for the rape of Helen. "Such provocations the Persians think," says Herodotus, "are as much beneath revenge, as the women themselves are undeserving regard."—Book I., c. 6. Women were not so lightly esteemed by the Greeks.

But we prefer the northern barbarians, who overran the Roman Empire, because they furnish stronger examples for our purpose, which cannot be supposed to have been influenced by education and civilization. Besides, we prefer them because their manners, habits, and customs, are the very foundations upon which the whole Shemitic family has raised that beautiful social structure, in which woman forms the cement and ornament, and man the solid materials.

We quote from Tacitus' Treatise on the Manners of the Germans, notwithstanding the opposition of M. Guizot, and shall notice his remark hereafter.

"Marriage," says he, "is considered as a strict and sacred institution. In the national character there is nothing so truly commendable. To be contented with one wife, is peculiar to the Germans. They differ, in this respect, from all savage nations. There are, indeed, a few instances of polygamy; not, however, the effect of loose desire, but occasioned by the ambition of various families, who court the alliance of the chief distinguished by the nobility of his rank and

character. The bride brings no portion; she receives a dowry from her husband." XVIII.

"In consequence of these manners the married state is a life of affection and female constancy. . . . . Vice is not treated by the Germans as a subject of raillery, nor is the profligacy of corrupting and being corrupted called the fashion of the age. By the practice of some states, female virtue is advanced to still higher perfection; with them none but virgins marry. When the bride has fixed her choice, her hopes of matrimony are closed for life. With one husband, as with one life, one mind, one body, every woman is satisfied; in him her happiness is centred; her desires extend no farther; and the principle is not only an affection for her husband's person, but a reverence for the married state. To set limits to population by rearing up only a certain number of children, and destroying the rest, is accounted a flagitious crime. Among the savages of Germany, virtuous manners operate more than good laws in other countries."

"The Germans," he says again, "are neither mustered nor embodied by chance. They fight in clans, united by consanguinity, a family of warriors. Their tenderest pledges are near them in the field. In the heat of the engagement, the soldier hears the shrieks of his wife, and the cries of his children. These are the darling witnesses of his conduct, the applauders of his valor, at once beloved and valued. The wounded seek their mothers and their wives; undismayed at the sight, women count each honorable scar, and suck the gushing blood. They are even hardy enough to mix with the combatants, administering refreshments, and exhorting them to deeds of valor." VII.

"From tradition, they have a variety of instances of armies put to the rout, and by the interposition of their wives and daughters again incited to renew the charge. Their women saw the ranks give way, and rushing forward on the instant, by the vehemence of their cries and supplications, by opposing their breasts to danger, and by representing the horrors of slavery, restored the order of battle. To a German mind the idea of a woman led into captivity is insupportable. In consequence of this prevailing sentiment the states, which deliver as hostages the daughters of illustrious families, are bound by the most effectual obligation. There is, in their opinion, something sacred in the female sex, and even the power of foreseeing future events. Their advice is, therefore, always heard; they are frequently consulted, and their responses are deemed oracular." VIII.

It was in reference to this detailed and circumstantial narration by the historian Tacitus, in a Treatise expressly written to describe a people in whom he had no other interest than what was common to every Roman citizen, that M. Guizot, a statesman, a scholar, an eminent citizen of a gallant and noble nation,—and, more than all, a man of sound practical sense, deserving the celebrity he has acquired,

has called "a single phrase of Tacitus." Were he anything less than all these things imply, we might venture to pass his sneer without notice; as modern generals pay less attention to fortifications in their rear than the former principles of war justified. But he occupies too important a position in the intellectual world, to be passed without proper attention.

His position is, that the present sexal relations of Europe grew out of the feudal system, after the Germans had conquered the Roman world, and was not introduced by them.

"Was it not," he asks, "in the bosom of the feudal family that the importance of women, that the value of the wife and mother, at last made itself known? In none of the ancient communities, not merely speaking of those in which the spirit of family never existed, but in those in which it existed most powerfully,—say, for example, in the patriarchal system—in none of these did women ever attain to anything like the place which they acquired in Europe under the feudal system. It is to the progress, to the preponderance of domestic manners in the feudal halls and castles, that they owe this change, this improvement in their condition. The cause for this has been sought for in the peculiar manners of the ancient Germans; in a national respect which they are said to have borne, in the midst of their forests, to the female sex. Upon a single phrase of Tacitus, Germanic patriotism has founded a high degree of superiority—of primitive and ineffable purity of manners—in the relations between the two sexes among the Germans. Pure chimeras! Phrases like this of Tacitus—sentiments and customs analogous to those of the Germans of old, are found in the narratives of a host of writers, who have seen, or inquired into, the manners of savage and barbarous tribes. There is nothing primitive, nothing peculiar to a certain race in this matter. It was in the effects of a very decided social situation—it was in the increase and preponderance of domestic manners, that the importance of the female sex in Europe had its rise, and the preponderance of domestic manners in Europe very early became an essential characteristic in the feudal system."

This short quotation disposes of one of the most important historical facts upon record, summarily, evidently without proper reflection, and most certainly without regard to authorities, similar to which all historic knowledge depends. It is not necessary

that we should defend the Germans in a matter in which they so justly take a patriotic pride. They have champions enough to wager their own battles. But we Americans, remote from the contentions and rivalries of European nations, will do honor and reverence to the people who first knew and valued their wives, mothers, and daughters, as they deserved to be valued,—whose savage natures were open to the softening influences of woman, in a higher and nobler sense than had before been conceived,—and who amid the disruptions of empires and the profligacy of Roman manners, cherished at their firesides the great principles of civilization, which so advantageously distinguish the modern from the ancient Shemites.

The first thing which attracts attention, is the manner of disposing of the authority of Tacitus. "Upon a single phrase of Tacitus, Germanic patriotism," &c. The reader can judge, from the quotations we have made from Tacitus, what the learned author understands by "a single phrase." This flippant mode of treating an opposing authority to a favorite theory, is a much easier way of evading it than could be done by counter-authorities, or sound argument. When this mode is resorted to by a literary coxcomb, we may, in charity, suppose him to be ignorant of his subject; but when resorted to by a man of acknowledged letters, thoroughly versed in argumentative processes, ignorance cannot be presumed, and we are compelled, in charity to human weakness, to suppose that his theory was too powerful in his mind to permit him to see the whole subject. This also appears to be probable, because a

little sprinkle of asperity at "Germanic patriotism," marks his sneer at Tacitus. We are somewhat surprised at it; for France has contributed her full share to the general stock of Shemitic glory, and need feel no alarm that she will be undervalued by giving precedence to a people, from whom all the nations of Europe have derived the elementary principles of modern civilization.

The next thing which attracts attention, is the singularly loose kind of authority the learned author condescends to give for the round assertion he has made—"Pure chimeras! Phrases like this of Tacitus —sentiments and customs analogous to those of the Germans of old, are found in the narratives of a host of writers, who have seen, or inquired into the manners of savage tribes." Where and who are they? Why not quote them in connexion with the assertion, that the public might immediately judge of their merits? Why postpone them to a long subsequent lecture? But we will examine these proofs presently.

If the sexual relations of the Germans depended wholly upon the authority of Tacitus, unsupported by any other history directly corroborating the facts; but supported by the corrupt history of the sexual relations of Rome, when she fell, and the beneficial reform of them after the invasion by the Germans, the proof of the correctness of Tacitus would be too strong to be disturbed by being stigmatized as "pure chimeras," by any man however exalted. But they do not rest on his single authority; for Cæsar, Florus, Valerius Maximus, Suetonius, Plutarch, Strabo, and several other authors of equal authority,

though not so minutely particular as Tacitus, directly confirm the general tenor of what he narrates. The single fact, that Cæsar took women hostages from the Germans, in preference to men, because they were the most sacred pledges in their estimations, is conclusive on the subject. This was a state affair of high importance, which was certainly predicated upon the known fact of the security of such pledges. Cæsar would have been laughed at if he had taken women hostages from an Asiatic nation. What Plutarch mentions of the influence of the Celtic women, is also proof to the point. What Cæsar relates of Ariovistus declining battle because the women thought it improper to engage at that time, is another, and the last instance with which we will trouble our readers; for the collateral authorities are so numerous, and so conclusive, that we are surprised they were overlooked by the learned author.

We might here confidently leave the subject; but we prefer to establish the same facts from M. Guizot himself.

In the commencement of his 4th Lecture on the "General History of Civilization of Europe," he tells us, "that out of the very bosom of barbarism sprang feudalism." In complaisance to the Romans, we always speak of the Teutonic nations as barbarians; but it is complaisance at the expense of truth, if "worth makes the man, and the want of it the fellow;" for if contrasted with the luxurious, lascivious, and degraded Romans, they had more of the truly noble qualities of man than their corrupt, but more polished slanderers. They were barbarians in the arts and sciences, and the Romans were barba-

rians in morals. But be it as the learned lecturer, and all the learned world, say of them, that these barbarians introduced feudalism. The fact is supported by history. About a century before the Christian era, the Cimri and Teutones made the first irruption into Italy, and demanded of the Romans stipendiary lands, to be granted to them, to be held as feudal tenures. See L. Florus, l. III., c. 3. Alexander Severus about 300 years after this event, copied this German practice to reward his military with the lands, cattle, and bondsmen of the conquered enemy. The Salii, Burgundians, and Franks, established feudalism in France, the Visigoths, in Spain, and the Lombards in Italy. Spellman, Crag, Wright, all our ancient and elementary lawyers, trace the origin of the feudal system to the great northern hive which overran Europe upon the fall of the Roman Empire. The very words *allodium*, from the northern word *allodh*,—and *feodium*, from the northern word *feeodh*, show the derivation of the system. The learned lecturer is therefore right in saying "that out of the very bosom of barbarism sprang feudalism;" and therefore feudalism is acknowledged to be a German institution. What sprang from feudalism? "It changed the distribution of population," says M. Guizot, "one of the most important elements of modern civilization." How did it change it? "Hitherto the lords of the territory, the conquering population, had lived united in masses more or less numerous, either settled in cities, or moving about the country in bands; but by the operation of the feudal system these men were brought to live isolated, each in his own dwelling, at long distances apart,"—says

M. Guizot. We grant it, again. Well—what was the effect of this isolation? "The social preponderance—the government of society passed at once from cities to the country," again says M. Guizot. We do not differ from him. What was this society which preponderated—which thus passed from the cities to the country, and remodeled society upon its own basis? There were then only two societies, Roman and barbarian. It was not Roman society, for this, according to M. Guizot, remained in the cities, and was entirely of another nature; it therefore must have been barbarian society. Let us follow this barbarian feudal baron to his "elevated solitary spot," "his lonely domain," "his castle," and see the fancy sketch of the learned lecturer, of the rise and progress of his domestic virtues, that we may be enabled to answer the question. What did this feudal baron carry with him to this "elevated solitary spot" upon which he built "his castle?" "His wife and children, and perhaps some few freemen" who "form a part of his household." But did he carry nothing more with him? Did he carry no manners, habits, customs, or sentiments with him? He had the German manners, habits, and customs of isolation, egoism, individuality, says M. Guizot. But had he nothing else—no sentiment—none of that chivalrous devotion to woman, which had always ennobled these barbarians in their native forests—which the Roman historians so loudly praised—which Cæsar took advantage of when he required hostages of good faith? No! says M. Guizot; he acquired it in "his elevated solitary spot,"—"his castle." "Confined, concentrated, called upon con-

tinually to defend itself, mistrusting, or at least shutting itself up from the rest of the world, even from its servants, in-door life, domestic manners must naturally have acquired a great preponderance." "The grosser passions of the chief"—"warfare and hunting"—opposed obstacles; "but its progress though slow was certain. The chief, however violent and brutal in his out-door exercises, must habitually return into the bosom of his family. He there finds his wife and children, and scarcely any but them; they alone are his constant companions; they alone divide his sorrows and soften his joys; they alone are interested in all that concerns him." He concludes this fancy sketch by asking the question, "Was it not in the bosom of the feudal family that the importance of women, that the value of the wife and mother, at last made itself known?" We answer, *Yes*. It "made itself known" from thence to the Roman citizens who knew it not before; it became, from thence, the most important element of modern social civilization—more important than the egoism, the individuality of the baron, which transferred the preponderance of social importance from the cities to the country. But although it first made itself known and felt, from this "solitary spot," it was admirably known and felt by the German baron before he went to "his castle." It was engraven upon his heart—it formed part of his isolation—of his individuality, of his being, more dear to him than his "personality"—part of that sacredness which Cæsar took with his female hostages.

Now we ask what has the learned author produced, to take from the Germans the high honor of

having given to Europe this most important of all the elements of civilization? What to justify his sneer at them for claiming it? Absolutely nothing but a hypothesis—a conjecture—that the lord being confined to his domestic fireside, would necessarily elevate the importance of women. Asia and Africa are covered with examples against the supposition, that such an effect is followed from such a cause; but no matter, suppose it to be probable. Shall a mere supposition, however probable, outweigh the concurrent testimony of a host of direct witnesses, all not only credible, but of notoriously high characters, all testifying directly to the point? In the absence of positive proof, suppositions, founded on probabilities, may be resorted to; but in the face of clearly attested facts, in their nature probable,—nay, from all analogy necessarily true—to abandon them, and adopt a theory, in itself improbable, is a new process in the search after truth. We say from all analogy necessarily true; because we aver that the whole Shemitic family, from their earliest history, exhibit the same propensity to honor and esteem woman; and that they have manifested it in degrees proportioned to the absence of patriarchal influences and civilization upon them. We know no reason why it should not apply to the Germans as well as to other members of the Shemitic family.

We now turn to a subsequent lecture, the greater part of which should have been incorporated in the one we have been considering; for it is in this Lecture that the proof is furnished to make all that Tacitus has said of the Germans, and all the just pride of modern Germans for the virtues of their ancestors, to

vanish like "pure chimeras"—the dew—or a March snow.

"I know of but one way," says the eminent author, in his 7th Lecture in his History of the Civilization of France, "of attaining anything like a correct idea of the social and moral state of the German tribes—it is to compare them with the tribes who, in modern times, in various parts of the globe, in North America, in the interior of Africa, in the north of Asia, are still almost in the same degree of civilization, and lead very nearly the same life." . . . . "By closely and critically observing these narratives, by comparing and analyzing the various circumstances, they become for us, as it were, a mirror, in which we raise up and reproduce the image of the ancient Germans. I have gone through this task; I have followed, step by step, the work of Tacitus, seeking throughout my progress, in voyages and travels, in histories, in national poetry, in all the documents which we possess concerning the barbarous tribes in the various parts of the world, facts analogous to those described by the Roman writer. I will lay before you the principal features of this comparison, and you will be astonished at the resemblance between the manners of the Germans and those of the more modern barbarians—a resemblance which sometimes extends into details where one would not have had the slightest idea of finding it."

We have no idea of following the learned author through the twenty-one parallels he has so industriously gathered out of "voyages and travels," "histories," "national poetry," and "documents," "concerning the barbarous tribes in various parts of the world,"—"in North America, in the interior of Africa, and in the north of Asia;" because it must be apparent a likeness of anything human, even that of the most polished citizen of *La Belle France*, may be produced by having the bounds of the earth for a field of selection, and by having the privilege of selecting a feature, or fractions of features, here and there. It is agreed that no woman is as perfectly symmetrical and beautiful as the *Venus de Medicis.* If, on the contrary, we should assert that there are thousands of women as beautiful as this sculptured marble, and proceed to prove it by a nose from one, an ear from another, an eye from another,

and so on with every feature, limb, proportion, contour, &c., we should be about as near to the establishment of our assertion, as the learned author has raised up and reproduced "the image of the ancient Germans." Throw aside from his third parallel the example of the Gauls (a tribe of Celts of the same northern hive, and kindred of the Germans; and an example drawn from a more ancient record than Tacitus), and the resemblance he has conjured up is a broad caricature, but no likeness.

Let us suppose, for the sake of argument, that every one of the twenty-one parallels he has produced are real likenesses of the Germans, instead of caricatures. What then? The possession of virtues by others takes nothing from the Germans. The contrasts between the Germans and Romans would remain the same. Roman civilization was all that was immediately affected by the German elements to produce the modern civilization of Europe. In this respect the difference between the Germans and the Tartar and American Indian parallels continues to be vast—indeed inexpressible; for the fruit of German virtue is seen all over Europe—over the world—while the fruit of the parallels remains immature, and concealed in the depths where they originated. If the Hurons respect women, they are the only tribe in America who pretend to do so. If the Guaranis prohibit polygamy from principle, they are the only savages in the two Americas who can boast of the honor.

To what conclusion does this eminent author arrive, from the parallels he has furnished? None against Tacitus; but merely that "those magnificent

descriptions which have so often been drawn "by modern German authors, should be thought of "precisely" as "we should think of Cooper's romances, "as pictures of the condition and manners of the savages of North America." This does not concern us; and yet we cannot refrain from saying, that if the patriotism of modern Germans has impelled them to romance a little on the virtues of their ancestors, it is at least a more amiable, and excusable weakness than a satire in the shape of a caricature, upon those from whom we have inherited all that we are worth. Frenchmen cannot expunge the German and Celtic blood from their veins; and if they could, and should, we fancy they would speedily fall from the elevation on which they stand. Our business, however, extends no farther than the ancient principles—the early sexual relations—and these, after having called them "pure chimeras," he has not in the least disturbed.

In the conclusion of his lecture he sums up with two points—First, "At the opening of modern civilization the Germans influenced it far less by the institutions which they brought with them from Germany, than by their situation itself, amidst the Roman world."—And secondly, "That which the Germans especially brought into the Roman world was the spirit of individual liberty, the need, the passion for independence and individuality."

Without finding fault with the first for being indefinite, we beg leave to add a third, and by far the most important item, of all that was introduced into modern civilization—the individuality, the personality of woman;—for, by the Germans, she was then

first permanently introduced as an integral part of society. In Asia woman was nothing, in early Greece and Rome she was much, and in later times something—but it was reserved for the Germans to produce her as an individual—a whole being, having individuality, personality, and entitled to go hand in hand with man in the progress of improvement. What an immense gain to modern civilization! Who can estimate it? And now when it is only beginning to be appreciated in its importance—to be realized—that a new mind, of a new intuitive kind—a mind more spiritual, more efficient in influences upon progeny than the male mind—amounting in numbers to as many more as there were minds before—all thrown into the common stock, for good rather than evil—are we not beholden to the Germans for something more than overthrowing ancient corrupt institutions, and introducing male individuality into modern civilization?

We have been led into this long investigation of M. Guizot's theory, as we have before said, not to defend the modern Germans, but to vindicate an important principle in the natural history of man from the misconception which might attend it from the weight of his literary character and the deservedly eminent position he occupies. An error of such a man is more mischievous than an error of one of less standing. It appears to us that he has mistaken an effect for a cause. The importance of woman, as an element of modern civilization, he regards as having been caused by the isolation, the individuality of man; we, on the contrary, believe, that the chief cause of the individuality of the ancient German

arose from his devotion to his family—the importance of woman in his estimation. It is astonishing with what fidelity he transferred his entire manners, habits, customs, and mode of life, from his native forests to the conquered Roman country. M. Guizot's description of him in his solitary domain, is precisely what Tacitus says of him in his grove, meadow, or at his fountain; and what M. Guizot says of him surrounded by his feudatories, corresponds with the clanship mentioned by Tacitus, "with degrees of rank and subordination;" in which "the chief judges the pretensions of all, and assigns to each man his proper station." It would be strange if he had carried all with him but his estimation of the importance of woman. In him this was a sentiment, a principle, and not an impulsive passion. Its first manifestation was to retire from the cities, which were foreign to his habits, and unsuited to his domestic happiness; but afterwards, when Roman corruptions, and the licentiousness consequent upon a mixed and ill governed society, outraged and insulted woman, the institution of chivalry issued from these lonely domains of the German baron to right her wrongs, and elevate her as much above, as she had been depressed below her proper standard. It was necessary, because the proper medium could not at once be attained. Like a pendulum receiving its first impulse, woman has since been oscillating in greater arcs each side of the perpendicular than her natural motions justify; but at every movement she is arriving more and more to the motion suited to her nature and usefulness.

Such were the people from whom Europe has

derived her present institutions, and whose principles may yet be perceived in everything which constitutes the refinement, the sentiment, and the propriety of our social institutions. It is singular that these elements of future civilization, and high intellectual progression, should be preserved in such purity among a barbarous people, at a time when the whole civilized world was in a state of moral corruption, endangering the dearest interests of mankind. It is yet more remarkable that just at the moment when they were required to save the whole Shemitic family from the hands of the Ishmaelites and Mohammedanism, these barbarians rushed to the rescue, and occupied the ground which would otherwise soon have been occupied by the blighting influence of the Saracens and Mohammedanism. Their noble, but rude elements of liberty and of mental progression, furnished admirable stocks upon which to engraft the Christian religion. It grew with them; and thus the world is indebted, so far as human agency is concerned, to a people among whom the rights of women were freely and fully acknowledged, for their morals, their institutions, and their religion.

Let us now turn to a description of the social manners and habits of the Ishmaelites. We will quote the character of the Bedouins from "Murray's Encyclopedia of Geography," Vol. II., p. 293. We commence with these, because they present the image of the ancient manners of the Ishmaelites in greater purity than any other tribe or nation of these people. They are, and have been for ages, also, those who have had the advantage in education. Long anterior to the time when the Germans con-

quered Rome, the Arabs were skilled in astronomy, alchemy, mathematics, and the healing art. Notwithstanding these advantages, let us see how they will compare with the European barbarians, in all their native rudeness.

"The right and practice of private vengeance, always prevalent among rude tribes, and in irregular governments," says our author, "is carried by the Arabs to the greatest height, and reduced to the most regular system. The fastidious pride of the high Bedouins, lays them open to many fantastic wrongs unfelt by others. To say to such an one, "Thy bonnet is dirty."—or "the wrong side of thy turban is out," forms an insult which only blood can efface. Even for one to spit in the presence of another is deemed a provocation which calls for vengeance. In case of murder, the right and duty of inflicting punishment are supposed to devolve on the friends of the deceased; and they seek to exercise it, not against the guilty individual, but against the head of the tribe, or at least the highest whom their swords can reach. Thus the distinguished Bedouins, especially when they visit the cities, must be armed at all points, and cannot for a moment sleep in security."

"The most prominent feature of Arab character," says our author, p. 292, "consists in the combination of hospitality and robbery, which are practised, the one most liberally and generously, the other in the most deliberate and merciless manner. It is towards strangers that these opposite dispositions are exercised; and the alternative of good or evil treatment often depends on very nice particulars. The rich traveller, who journeys in a caravan over the plain, is considered a rightful prey; while he who approaches singly, in a defenceless state, and soliciting protection, acquires an irresistible claim to it. The being once admitted to partake common bread and salt is a sure pledge of safety and protection; and he who, by whatever means, has penetrated into the tent of the Arab, has reached a sanctuary. A change of circumstances often renders the same person an object of the most opposite feelings. He who, under the domestic roof, has experienced the most lavish kindness, may, if met in the open plain be robbed and murdered; and he who, after being plundered of every thing, enters with confidence the tent of his enemy, will be commiserated and his distress relieved. In the daily habits of life, the generous feeling predominates. A Bedouin, as he sits down to his meal before the door, hesitates not to invite the passenger to share, without consideration that he himself is poor, and the provision scanty."

Having now a description of their general character, we will apply to Mrs. Child for their treatment and estimation of women.

"The Bedouins," says she, vol. I., p. 37, "live in tents, divided into three apartments, one for the men, one for the women, and one for the cattle. Though often ragged and half clothed, the Bedouin wo-

men generally manage to have jewels of some kind or other for the neck, ears, nose, and arms. Those who cannot afford gold or silver, wear a nose ring of iron, sometimes two or three inches in diameter. The wives of Sheiks, and other men of rank, generally wear rows of sequins across their foreheads, and fastened in bunches to the ends of their long braided hair. Rings in the nose, and very large clumsy bracelets about the wrist, are common. Their manner of churning butter is curious. They put the milk into a goat skin with the hair all on. This is suspended by strong cords to the branch of a tree, and a woman shakes it with all her might until butter is produced. These skins are seldom washed, and the butter, of course, is none of the sweetest."

She continues :—

"The Bedouins consider their wives as slaves, and exercise arbitrary power in punishing them for any fault. One of them is said to have beat his wife to death merely because she had lent his knife without his permission, though she begged pardon, and offered in the humblest manner to go bring it for him. Being called before a council of the chief men of his tribe, he acknowledged the offence; saying he had told the deceased never to meddle with any thing of his, and he was determined to have a wife who would obey him better. The chief reproved him for not first making a complaint to him; adding that if his wife should, after such a step, be guilty of disobedience, he had a right to kill her, if he pleased. The murderer was ordered to pay four sheep, as a penalty for not making application to the Sheik or chief; and soon after, he married another woman."

"If the wife of a Bedouin is seduced," p. 41, "the laws allow him to kill any one of the offender's family whom he may happen to meet. Sometimes the affair is settled by the seducer's father giving the injured husband three or four of his daughters to sell, for as high a price as he can obtain."

"The Kereks are not so kind to their wives as the Bedouins, with whom they often intermarry. A woman cannot inherit the merest trifle of her husband's property. Even during his lifetime he does not supply her with necessary clothing; she is obliged to beg of her father, or steal her husband's wheat, and sell it clandestinely. No greater insult can be offered to a Kerek than to tell him he sleeps under the same blanket with his wife; for they do not allow the women to share their apartments. When a wife is ill, they send her back to her parents, saying they paid for a healthy woman, and cannot have the expense of an invalid."

"A Persian woman," p. 76, "under the dominion of the kindest master, is treated in much the same manner as a favorite animal. To vary her personal graces for his pleasure, is the sole end and aim of her existence. As moral or intellectual beings it would be better for them to be among the dead than the living. They are allowed to learn a little reading, writing, and embroidery; but their reading is confined to the Koran, and even that they generally read very imperfectly. Dancing and music are little practised, except by a public class of women, usually hired at festivals and entertainments, and of a character notoriously profligate. These girls are more remarkable for agility than grace in their motions."

"The Persian women are kept continually shut up in the *harem*,

which they rarely leave from the cradle to the grave. They are visited only by female relations, or female teachers, hired to furnish them their scanty apparatus of knowledge. The mother instructs her daughter in all the voluptuous coquetry by which she herself acquired precarious ascendency over her absolute master; but all that is truly estimable in female character is neglected, as it ever must be where nothing like free and kind companionship exists between the sexes. A resident in Persia declares that the women are ignorant, and inconceivably gross in their ideas and conversation. Under such a system it could not be otherwise."

"The contempt in which women are held is singularly exemplified by a Persian law, which requires the testimony of four of them in cases where the declaration of two men would be sufficient. While talking with a person of rank, it would be considered grossly impolite to make the most remote allusion to the female part of the family; even if his beloved wife were on her death bed, it would be deemed an almost unpardonable insult to make any inquiries concerning her."

We think it unnecessary to proceed further in our quotations respecting the Ishmaelites. The same principle, varied a little as to severity or relaxation, runs through the species. The prevailing opinion among them is that women were sent into the world to be the slaves of men.

We find very little amelioration in the condition of women among the Japhethites. The Chinese, the most numerous nation of this people, hold females in so low an estimation, that many thousand female infants are annually exposed to starvation, or to be devoured by dogs. The Encyclopedia of Geography, already quoted, Vol. II., p. 418, says:—

"According to the Dutch Ambassadors, females in that country may be considered universally as objects of traffic. Those who promise to be handsome are purchased in early youth by the class of dealers above mentioned, and trained for the harems of the great, where they pass the rest of their lives, according to the Eastern custom, in splendid seclusion. The confinement, if less rigorous than in some other of the Asiatic states, is yet strictly insured by an infirmity arising out of the fantastic taste which prescribes, as an indispensable to female beauty, that the feet be reduced to the most minute possible dimensions. This, by compression from an early age, is effected to such an extent, as to leave them barely able to totter from place to place, holding by the wall, or other supports. The lower ranks, on the other hand, after being purchased by the husband, are treated almost as

slaves, and subjected to the hardest labor; they have even been observed by travellers, yoked to the plough."

Mrs. Child, Vol. I., p. 147, says of the Chinese :—

"A bridegroom knows nothing of the character or person of his intended wife, except what he gathers from the report of some female relative or confidant, who undertakes to arrange the marriage, and determine the sum that shall be paid for the bride. Very severe laws are made to prevent deception and fraud in these transactions. On the day appointed for the wedding, the damsel is placed in a close palanquin, the key of which is sent to the bridegroom, by the hands of some trusty domestic. Her relations and friends, accompanied by squalling music, escort her to his house : at the gate of which he stands to receive her in full dress. He eagerly opens the palanquin and examines his bargain. If he is pleased, she enters his dwelling, and the marriage is celebrated with feasting and rejoicing; the men and women being all the time in separate apartments. If the bridegroom is dissatisfied, he shuts the palanquin, and sends the woman back to her relations; but when this happens, he must pay another sum of money equal to the price he first gave for her. A woman who unites beauty with accomplishments, brings from four to seven hundred louis d'ors; some sell for less than one hundred. The apartments of the women are separated from those of the men by a wall, at which a guard is stationed. The wife is never allowed to eat with her husband; she cannot quit her apartments without permission; and he does not enter her's without first asking leave.

"Divorces are allowed in cases of criminality, mutual dislike, jealousy, incompatibility of temper, or too much loquacity on the part of the wife."

In page 156, she says:—

"The poorer class of widows are often sold for the benefit of the deceased husband's relations, who are desirous of regaining the money originally paid for them. The arrangement is often made without their knowledge, and in spite of their resistance. As soon as the bargain is concluded, the new proprietor sends a palanquin well guarded, and the widow is locked up in it, and sent to his house. If avaricious relatives force a woman to this step before the customary period of mourning expires, she can obtain redress by application to the mandarins. A widow who is averse to a second marriage, and has no one on whom she can rely to repay the original price, may avoid it by becoming a *bonze* or *nun*."

This example is sufficient for our purpose, without referring to the Japanese, and others of this species, who, although they vary from this type in some particulars, yet agree with it in general.

The Canaanites have never made any advance in the arts and civilization from the earliest known

period. The author of the article in the Encyclopedia of Geography, Vol. III., p. 38, says:—

"It is impossible to name a region tolerably peopled, where any progress at all has been made in the arts, which is so completely illiterate as Negro Africa. It is not enough to say that it has neither books, authors, nor learned men. In no part of this extended region is there an alphabet, or a hieroglyphic, or even a picture or symbol of any description. All those refined processes, by which the ideas of one mind are made to pass into those of another, are entirely unknown.

"The universal amusements of the negro," he continues, p. 39, "above those of mere sensation, are dancing and music. The former is invariably performed in the open air. As soon as the sun declines, and its intense heat abates, there is dancing from one end of Africa to the other. Twenty-five hundred years ago, Hanno and his companions were surprised, immediately after sunset, to see lights glittering along the shore, and to hear, on every side, the sound of musical instruments. The passion, however, with which this amusement is pursued, has not led to any refinement in the art. Their performance consists chiefly of violent and grotesque movements; leaping, stamping on the ground, bowing their heads, and snapping their fingers. In their music, also, noise appears to be the chief, if not the sole object. Their drums and their trumpets, or rather horns, produce a horrid dissonance, against which, according to some travellers, a whole bale of cotton would be required to stop the ears.

"Polygamy, throughout all tropical Africa, has no limit but that of ability to maintain a considerable number of wives. By the great it is practised to the utmost that their circumstances can admit. To have numerous wives and children is considered a matter of state, and is always made their first boast. It forms even a source of wealth; for, except the principal wife, who is mistress of the household, and the sacred wife, who is consecrated to the *fetiche*, all are made to work hard, both in tilling the fields, and in manufacturing mats and cloths. Even the principal wife often urges her husband to take fresh mates, as a means of increasing the importance of the establishment over which she presides; it is also customary to make her a handsome present on the occasion. In the towns on the coast the more wealthy take usually from three to twenty wives, while the Kings raise the number from eighty to a hundred; but in Ashantee, Dahomey, and other despotic interior kingdoms, the privilege knows no bounds, and the number is often carried to several thousands. It is swelled, not only by captives taken in war, but by selection which the King has a right to make of the fairest and most accomplished females within the circuit of his dominions. A great part of the nation are thus reduced to celibacy, and very dissolute habits prevail. In many of the towns on the Gold Coast, a body of courtezans are maintained by the state, and are considered as public servants. Not a few, even of the wealthy, are willing to derive a profit from the irregular conduct of their secondary wives. Notwithstanding the overgrown families of some of the great, such habits cannot fail to keep down the amount of population, and, by causing a neglect of education, to lower the intellectual standard of the people."

"The wives of the King of Dahomey," says Mrs. Child, vol. I., p. 253, "generally to the number of three thousand, are formed into a regiment, part of which act as his body guard, equipped with bows, arrows, drums, and sometimes muskets. They are regularly trained to the use of arms, and go through their evolutions with as much expertness as any other of his majesty's soldiers."

"Captain Clapperton thus describes a visit he received from the King of Kiama: 'Six young girls, without any apparel, except a fillet on the forehead, and a string of beads round the waist, carrying each three light spears, ran by the side of his horse, keeping pace with it at full gallop. Their light forms, the vivacity of their eyes, and the ease with which they seemed to fly over the ground, made them appear something more than mortal. On the King's entrance they laid down their spears, wrapped themselves in blue mantles, and attended on his majesty. On his taking leave, they discarded their attire; he mounted his horse, and away went the most extraordinary cavalcade I ever saw in my life.'"

"At Sackatoo Mr. Clapperton met a troop of African girls drawing water from the gushing rocks. He says—I asked them for a drink Bending gracefully on one knee, and displaying at the same time teeth of pearly whiteness, and eyes of the blackest lustre, they presented a gourd, and appeared highly delighted when I thanked them for their civility; remarking to one another—Did you hear the white man thank me?"

"The African women," p. 255, "are so passionately fond of dancing, that wherever the itinerant minstrels appear, they flock around them, and encourage them by songs, while they beat time by clapping their hands. Indeed with this mirth loving race every thing furnishes occasion for festivity and frolic. Their marriages and funerals conclude with dances; every moonlight night the men and women meet in great numbers to enjoy this favorite exercise; and if the moon be wanting, they dance by the light of large fires. The young girls often unite together to buy palm wine, and after an entertainment at the hut of one of their companions, they go together through the village, singing in chorus a variety of charming airs, marking time by clapping their hands; these strains, though simple, and often repeated, are by no means monotonous.

"Among the Wolofs, when a young man wishes to marry, he signifies it to the parents of the girl, who meet him at some public place in the village. When the young couple are surrounded by a circle of relatives, the man offers as much gold or merchandise, oxen or slaves, as he can afford to pay. The girl's consent is not necessary for the completion of the bargain; but if she refuses to fulfil the promise of her parents, she can never marry another.

"Among the Sereres, when a lover has formally obtained the consent of relations, he summons his friends to assist in carrying off the object of his choice. The bride shuts herself up in a hut with her companions, where they maintain an obstinate siege before they surrender to the assailants.

"In Bambuk, a bride is conducted to the door of her future husband, when she takes off her sandals, and a calabash of water is placed in her hands. She knocks, and the door is opened by the relations of the bridegroom, who remains seated in the midst of the hut.

The bride kneels before him, pours the water over his feet, and wipes them with her mantle, in token of submission."

"In Dahomey," p. 278, "all the unmarried females throughout the kingdom, are considered the property of the despotic sovereign. Once a year they are all brought before him; he selects the most engaging for himself, and sells the others at high prices to his subjects. No choice is allowed to the purchaser. He pays twenty thousand cowries, and receives such a wife as the King chooses to appoint; being obliged to appear satisfied with the selection, whatever may be her aspect or condition. It is said that some have, in mockery, been presented with their own mothers. This brutal and bloody sovereign usually keeps as many as three thousand wives, who serve him in various capacities. These women are watched with the most savage jealousy.

"The King of Ashantee has three thousand three hundred and thirty-three wives; a mystical number, on which the prosperity of the nation is supposed to depend.

"The King of Yariba boasted to Captain Clapperton, that his wives, linked hand to hand, would reach entirely across his kingdom."

We have now produced sufficient examples in the different species to show the specific relations between the sexes. These relations are evidently founded upon the natural temperaments of the different species. On no other principle is it possible to account for the universality of the same relations prevailing in each species as a distinct whole. Education has, no doubt, modified them; but it never introduced the principles upon which they are founded. If they were the result of education, then the condition of the Ishmaelite women would have been better, at the time of the fall of the Roman Empire, than that of the women of the barbarians who invaded it; because they were decidedly the best educated. It may be imagined that education took a wrong direction, originally, with one species, and a right direction with another, which would be sufficient to account for all of the difference. Such a direction might have happened in regard to matters that are entirely artificial; but, we apprehend, such reasoning is inapplicable to a natural principle so

deeply fixed in human nature as the sexual relations. Education, as a systematic business, directing the mind to a definite object, must be the result of a state of society subsequent to the existence of natural relations between the sexes, and upon which the subsequent customs of the tribe or nation must be founded. Custom would therefore naturally grow up among a people, before any artificial education could be used among them, to give it an artificial direction; especially in those matters which had their commencement with the origin of mankind. These customs would naturally assume the shape of the constitutional temperament of the people; and would necessarily vary with it. Education itself, in all subsequent periods of civilization and intellectual improvement, receives its direction in conformity with such temperament: and although it might, in progress of time, modify the circumstances of the sexual relations, it never could subvert the natural principle, and make it directly opposed to the specific constitutional temperament. If a people had no natural principle or attribute of adoration, no education could make them adore the Creator; so if a people had no benevolence, they could never be taught to compassionate distress. For the same reason if the species differ constitutionally in their sexual love, the relations of the sexes must be different. An intellectual, sentimental, generous, benevolent, and brave people, will adopt sexual relations in conformity with such a character, even before such principles shall have developed in any high degree by education. The elements of such developments, are principles of their natures, and

exhibit themselves at the earliest periods of their histories, in the organizations of their social institutions. Greece, Rome, and every Shemitic nation, in their earliest histories, exhibit the truth of this remark. These are characteristics of the strenuous temperament. Hence the perfect equality of the sexual relations in this species, when they have not been corrupted by immediate contact with others, by the force of education. The Caucasian nations are modern examples of such corruptions; and the Jews, Greeks, and Romans, were ancient examples.

On the other hand a moderately intellectual people, "whose hand is against every man and every man's hand against them;" brave, jealous, revengeful, destructive, and cruel; with just enough of benevolence to compassionate individual suffering under their view, when it does not oppose selfishness, will also adopt sexual relations, in conformity with such a character, in the early formation of their social institutions. Subsequent education must follow the principle and rivet it more firmly, as it developes. The history of every Ishmaelitic nation proves the truth of this remark. The women of the nomadic nations of this species are treated with greater liberality than the women of those nations, which are in a higher degree of refinement. The American Indians, the Moors of the Desert of Zahara, and the wandering tribes of Central Asia, are by no means as cruel and as jealous as the Turks of Europe, the Arabs, and the Persians. These are characteristics of the callous temperament of the Ishmaelites. Hence the tyranny, cruelty, and absolute inequality of the sexual relations among this

species; and, what is remarkable no relaxation of this relation has at any time taken place, by reason of example or education. The Turks have been six hundred years in Europe without having undergone the slightest change. Indeed so powerful is this natural constitutional temperament, especially in the Ishmaelitic species, that the slightest mixture of their blood with other species invariably corrupts generations. India has suffered from this cause, and our Spaniards, though comparatively slightly tainted, show the marks of degradation too visibly to be mistaken.

The passive temperament of the Japhethites is also unfavorable to liberal and equal sexual relations. Self-satisfied, vain, and indifferent to every thing which does not relate to their own immediate wants and desires; without energy of character, and without sentiment; without any active benevolence; with an intellect almost wholly confined to the necessary arts, and such embellishments as flatter their inordinate vanity, or bring immediate recompense, it is no wonder that they expose female infants to death, and sell their relations' widows, to save expenses, or to reimburse money previously expended. Although the Japhethites are not so rigorous or vindictive in their sexual relations as the Ishmaelites, they have but little regard to the elevation and dignity of the female character. Their passion of love, like that of all the dark races, is a sensation not a sentiment, but it is specifically qualified by their passive temperament, so that it is not often carried to such excesses of cruelty, prompted by the ever

active and vindictive jealousy of the callous, or the roused violence of the sluggish temperaments.

The Japhethic species present some remarkable features in their sexual relations. In Thibet one woman is the wife of all the brothers in a family, however numerous. The women are jealous of their husbands, not without reasonable cause for apprehension. The children belong to the fathers respectively according to age; the first born child belonging to the oldest, and so on successively. The Birmans allow their women great personal freedom. Social intercourse is with them much on the same footing as with Europeans. The law allows but one wife; but, mistresses under the same roof are as numerous as the inclination or means of indulgence will allow. So also the women of Cochin China have unrestrained liberty in social intercourse, although they are condemned to severe and laborious occupations. In Siam, also, the women enjoy much personal freedom; but they have a plurality of wives.

These peculiarities, however, do not belong to the subject to which we are restricted, unless they should be thought to be of sufficient importance to qualify the principle we have adopted. They may qualify it; but much has yet to be learned of the history of these people, before we could say to what such qualification should extend, or in what respect it should be applied.

The sluggish temperament of the Canaanites is manifest in their sexual relations. It is not incompatible with such a temperament that those who are characterized by it, should occasionally, or even frequently, be roused to boisterous jollity. The Crea-

tor has benevolently united with the condition and destiny of every creature, the peculiar qualities adapted to such condition and destiny. The wretchedness of Africa would be beyond human endurance, if it were not for the peculiar temperaments of the people, relieved by a disposition to merriment and boisterous jollity, in which no other people on earth can rival them. It may be called the land of mirth and jollity, as well as the land of sorrow and desolation. Sullenness is their chief refuge for privations and difficulties; boisterous jollity and song their chief resort for relief and amusement.

The Shemite is constitutionally calm, cheerful, dignified, benevolent, sentimental, and thoughtful. The Ishmaelite is reserved, austere, gloomy, cruel, vindictive, and voluptuous. The Japhethite is quiet, orderly, industrious, courteous, indifferent, and insinsere. And the Canaanite is indolent, careless, sensual, tyrannical, predatory, sullen, boisterous, and jovial. Such are the specific characteristics, and the sexual relations are founded upon them.

But there are some broad features apparent in the sexual relations of the different species which must not be overlooked, as we regard them as of the very highest importance to the ultimate perfection of the species. It is remarkable too, that these circumstances are exclusively combined in the Shemitic species.

The first remarkable feature is the fact that the Shemites alone experience any benefit from female influence upon society. The important advantages of such influence can never be questioned by any one of refinement, and acquainted with their virtues.

Whether civilized or savage, white, red, yellow, or black, they are universally more abundantly gifted with the winning graces and the sweet charities of the heart, than man. Whoever has paid the least attention to the structure of society must have remarked the influence of woman upon it. Nor is it only in the outward polish of the manners of a people that female influence is the most important. Morals and intellect invariably take their stations from the elevation or depression of female character and position in society. Wherever their influence is impaired by restraint, or shut out from society, men become degraded, or barbarous; and a degradation or barbarism from this cause is so hopeless of amelioration, that the most sanguine philanthropist can hardly hope for improvement. Whatever may be the rudeness or savageism of a people; however low they may be sunk in morals and intellect; if they have only permitted their women to stand upon the same level with themselves, the hope may be reasonably entertained of elevating them. Not so, however, if, as they descend, they continually thrust the females below them. Such a people can be seldom reached by instruction, because there is no way of getting at them. Men must be in a high state of moral and intellectual improvement to desire, or to receive instruction from other men, whom their rugged and jealous tempers always regard as rivals or opponents. Women, on the contrary, having more benevolence in their natures, are more apt to receive with kindness all efforts to improve them. Even their foibles are so many doors to let in instruction, to a certain extent. Naturally fond of the embellishments of

life, and proud of their personal charms—more quick and intuitive—they are much easier approached and instructed in the rudiments of refinement and civilization than men. It is contrary to all history to suppose a people sunk to a low state of savageism, who at the same time had proper notions of the relations of the sexes. This circumstance alone would prevent the utter prostration of morals and intellect which is beyond the hope of recovery. It is a matter of history that no people have ever been found enjoying a republican form of government, who are tyrannical and cruel to their women; and the contrary is a general, if not a universal fact, that no people have been long subject to an absolute despotism, whose sexual relations were upon an equality.

The next remarkable feature to which we call attention, is the fact that among all of the dark races, with very few and unimportant exceptions, polygamy universally prevails. To suppose that accident gave rise to this sexual relation, would be to confer upon accident a universality and uniformity only attainable by established natural laws. For the honor of mankind, and to excuse the unnatural crime, we might suppose that the frequent and destructive wars of the early ages, destroyed so many men, that, to make up for the deficiency, and kindly to supply all women with husbands, polygamy came to be adopted. But the history of the different species of men contradicts such a supposition; for although polygamy prevails, and has prevailed universally among the dark races, it never did, nor does it now, prevail among the Shemitic species. It is true that

wars among the dark races are more desolating and destructive than among the white; but among these they have been sufficiently destructive to establish polygamy, if the principle were agreeable to their natures. Polygamy, therefore, must have had its origin in the constitutional temperaments of the people with whom it has always prevailed; and its manifest tendency is to perpetuate the practice by generating voluptuousness, and corrupting the morals and intellect. Nothing can be clearer, both from the known nature of human beings, and the fact that the births of the males and females, in the Shemitic species of men, are about equal, that polygamy is contrary to the natural, as well as the divine law. That the dark races are so constituted as to have universally adopted this cruel and unnatural practice is one of the mysteries of God's providence, as unaccountable as the selection of the line of Shem to be the father of His chosen people, to the exclusion of others; and afterwards of the rejection of the Jews, and the selection of the gentiles for the reception and propagation of the gospel. The fulness of time for them has not yet come; but when it shall have arrived, and all the weights which now naturally oppress the dark races, shall have been lifted from them, who knows the extent of the power of their slumbering faculties to contend with the Shemites for the honor and dignity of precedence, in all the things which elevate man above the brutes that perish?"

Another important feature to which we ask attention is the fact, that, in the relations of the sexes in all the dark races, the sentiment of love is entirely

wanting. Sensual desire, and this exclusively confined to the male, as it regards the choice of mates, is the only guide to matrimony. The will of the woman is not regarded in the slightest degree. She is a mere passive instrument—or, which is more literally true—a mere article of merchandise in the hands of men, to be transferred, at pleasure, to the highest bidder. That such an arbitrary, tyrannical, and brutal social arrangement should be adopted by four-fifths of mankind, is one of the most surprising things in the history of the race. It can have no foundation in any natural right of the male, unless we should regard the natural temperaments of the races as the foundations of natural rights. Be this as it may, we have no hesitation in saying, that it is directly opposed to any high moral and intellectual cultivation of the people among whom it prevails. A free and unrestricted choice on both sides, by the male and female, is essential to the highest perfection of the species. If there is any difference between the sexes, which should have the largest liberty in this respect, with a view to promote the advantage of future generations, we think it would fall to the woman. By nature she has a nicer and quicker perception of all the qualities of mental and moral beauty than man; and, if there is any difference between the parties, she has a deeper interest at stake in the connexion, because she is more dependent in every respect, and has less physical power to vindicate her rights. She can have no security for her happiness but in the magnanimity of the male, or in the hold she has on his affections. Human laws give her no security be-

yond what the natural principle inculcates; for these always reflect the feelings of those who enact them. Examine the laws of the most refined of the dark races, and behold how feebly they protect female rights; but turn to the laws of the white races, and observe how much more stringent they are in favor of women. These differences are not accidental, but they reflect the different natural temperaments in regard to the sex.

The law of love of the sexes, in man, has a higher object than the mere perpetuation of the species. It has a direct reference, as we will hereafter show, to the progressive moral and intellectual improvement of the race; and, when not interrupted in its impulses by artificial restraints, will, by its own power, carry out the design of the Creator towards the perfection we are destined to enjoy.

Man is a social, a moral, and an intellectual being. The important influence of the natural law of sexual love on all of these important particulars, must be apparent to the most casual observer. Social institutions have their foundations in domestic regulations. Patriarchal governments were nothing but family laws, or the will of the parents. Suppose Shem to have governed by love, with sufficient discipline to have enforced obedience—Japheth to have governed by a rigorous exaction of implicit and passive obedience—Ishmael to have governed by violence, jealousy, and revenge—and Canaan by an utter carelessness of the future, if the time being could be enjoyed in boisterous mirth and jollity, but by cruelty and destructiveness when not so engaged—we should then have tolerably good prototypes of

the several kinds of national governments which have always been adhered to, since that period, by their descendants. Some variations have taken place; but very few of them to such an extent as not to bear the impression of the supposed types. In general, therefore, nations only exhibit the collected, or concentrated manners, habits, customs, and regulations of the families which compose them. We are in the habit of saying that the moral and intellectual condition of a people depend upon the kind of government under which they live. This is generally true, to a considerable extent, in nations governed by military force, after having been conquered; but it is true to a very limited extent only, in governments of long standing, or which may be supposed to have originated by social compact, express or implied. In the origin of all governments the character of the civil institutions must conform to the leading features of domestic, or fireside regulations. That people are essentially and necessarily a nation of freemen whose domestic relations preserve the purity of equality of rights, founded upon love and benevolence. They may be enslaved for a time; but no tyrant can sit securely on his throne with such materials for its support; for in despotic governments there must be regular gradations of despotism through the whole mass of society.

Moral and intellectual endowments also depend, in a very great degree, upon sexual love. "Like begets like," is a universal law of nature; nor is it in man, more than in any animal, confined in its operations to a mere physical likeness. All of the

attributes, qualities, properties, and powers, natural and acquired, which have relation to the physical and psychical improvement or degradation of man, are controlled, more or less, by the law of sexual love. Any restraint upon its operations, excepting the regulations which the progress of society in social intercourse will always adopt, will impair its power for good; for a freedom of choice in matrimonial engagements is necessary to its perfection. The taste for sexual beauty, like a taste for any other beauty, will improve by cultivation, and a consequent improvement in the condition of society. In a rude state of society, in which the sexes stand upon an equal footing, a man might chose a wife for her beauty, grace, and other personal perfections; but such a woman, without regard to his face or form, might love a man who combined all the qualities for her protection and security. In a more advanced state of society, when her security and protection did not depend exclusively upon her husband's arm, other objects would naturally engross attention, and become subjects of sexual love.

But we design to discuss this important branch of our subject in our next chapter, and will, therefore, not anticipate it. The laws relating to sexual love, or a taste for personal beauty in the different species of men, were designed by the Creator for the double purpose of giving specific character to each species, and to keep each species distinct from every other. Our object in saying what we have above said of it, is to show that it is not applicable to the dark races of mankind, in the sense in which it is applicable to the white race. With very few and trifling exceptions,

in all of the dark races, woman is entirely passive, and wholly under the control of the will of man. No sentiment enters into the bond of their union. The Ishmaelite, the Japhethite, and the Canaanite, are fundamentally the same in regard to this matter; but their differences arise from the peculiar institutions which have grown out of their specific characters, without regard to any modifying influences from sexual love.

CHAPTER XIII.

THE GREAT NATURAL LAW WHICH HAS KEPT EACH SPECIES DISTINCT FROM EVERY OTHER.

Nothing in nature produces such delightful sensations in the beholder as personal beauty, especially if the object should be of the opposite sex. The young are enraptured with it, and the aged are pleased. It is a mantle that covers many faults, more effectually than drapery covers personal defects; because the faults of the beautiful have only a softening effect, in general, and, too frequently, are overlooked by beholders. The spots of the sun take nothing from his apparent beauty, and nothing from his sensible heat, although they diminish both. Such spots may be necessary in the economy of nature, to equalize and temper the heat of seasons,

which might otherwise accumulate, and produce disastrous results. For as, on the one hand, the Creator has fixed a limit to cold, by the singular law of the expansion of fluids at a certain low temperature; so, on the other, he may have fixed a limit to heat, by as singular a law, that a certain mode or degree of it shall no longer expand, but condense it, and thus prevent radiation. As the spots on the sun are only seen and known by philosophers, who curiously pry into his face by the help of instruments, and are neither seen, known, nor felt by the bulk of mankind; so the spots upon beauty are neither seen, known, nor felt, but by a curious few, who look through age, interest, or experience at the object.

The influence of the sun upon the natural world is similar to the influence of sexual beauty upon our race. The one is the cause of all the activity, luxuriance, and maturity of vegetation; and the other is the cause of all the activity, luxuriance, and maturity of man. The first displays the deep blue vault of heaven in all of its extent and sublimity, and discloses all the gaudy shows and delightful scenery of mountain, valley, and plain; and the last displays to the mind a heaven far more deep and rich, absorbing and sublime, and exhibits to the imagination pictures and scenes infinitely more delightful than the gaudy shows of mountain, valley, and plain.

Personal beauty is one of the most powerful impulses of our nature, and has a direct and positive influence upon the destiny of man, as it regards the development of his moral and intellectual faculties.

What this personal beauty is, and its mode of operation on the different races of men, are questions of primary importance in the natural history of the several species. We contend that on these two circumstances, more than on any others, depend, not only the permanent separation of the species, but the actual advance, retardation, or retrogression of any, and every species, in moral and intellectual power.

What, then, is beauty, this powerful stimulant of our natures? Many theories have been invented by philosophers, to determine in what it consists, on the supposition that it might be reduced to a single principle, applicable to all subjects and all men. But those who have sought to confine it by rules of symmetry and proportion of parts, or a waved and serpentine line, have found this subtile and etherial principle to elude their measurements and mathematics. It would have been very convenient if they had discovered the principle to be the subject of mensuration or mathematics; for every man and woman could then sit quietly down, and determine, to a fraction, the proper sum of passion to be devoted to any object; and the whole race might escape the many extravagances philosophers sometimes laugh at and sometimes deplore. But philosophers may establish rules, and artists proportions, which may answer their purposes in the closet, at the easel, or in the studio; but young men and women will not stop to learn as a science, a matter which nature teaches with such facility that the scholars get the whole by heart, before a professor in the science could give a definition of the word or subject. A young couple, when they first feel that tenderness

which is premonitory of the passion, would scarcely suspend its progress until they had measured the fingers, wrists, necks, heads, &c., of each, to determine the symmetry and proportion of parts. Nor would they be in less danger of a confirmed fit of the passion, if they should attempt to measure the serpentine lines of the face, neck, &c. Such efforts would be abandoned in despair, after two or three ineffectual efforts at accuracy, and resort be had to the old method of sighs, blushes, and the et ceteras which constitute the poetry, not the philosophy, of love.

Still in search of a universal principle applicable to all kinds of beauty, other ingenious men advocated *utility* as containing the great element of beauty. But we doubt whether these utilitarians would find many to agree with them, in asserting that a field of turnips was more beautiful than a field of roses and tulips; that a hog was more beautiful than a leopard; or that a turkey-gobbler was more beautiful than a peacock. Still more would we doubt whether the fat wench who cooked a savoury dish, must necessarily be more beautiful than the mistress, who only knew the etiquette of presiding at the table.

The doctrine of perfection, being a combination of the preceding theories, is scarcely deserving of more consideration. If by perfection we design to signify an exact conformity to any adopted standard, it is something not found in any class of things in nature. Variety in boundless profusion characterizes the works of creation. There certainly is a standard of natural beauty in things and persons; but it is only a beau-ideal, a kind of concentrated public opinion,

made up by an infinite variety of tastes, in which every one throws in some favorite feature, and retains others, precisely as we do at elections. Yet if each had his whole choice, scarcely one would be satisfied with the result thus obtained. The Greeks are noted for having caught and embodied this beau ideal in their sculpture; and yet, if it were possible to produce a living Phryne, in all respects equal to the Venus, her representative, she might be made to feel the pangs of jealousy by many beauties, whose forms and features would never have been selected by a Grecian artist for the display of his skill. What is very beautiful in marble, might be very insipid in flesh and blood.

Variety of form, with uniformity of structure, was the admired theory for a while, during which triangles, squares, pentagons, ratios, and proportions, were calculated with mathematical precision, and the sum of beauty contained in each precisely ascertained. The elephant has greater variety of form than the horse, with equal uniformity of structure; yet no one will compare the colossal brute, with his great ears, small eyes, and long snake-like trunk, with the beauty of the horse. But variety is not an essential of beauty, for it is often seen in a single color. The Romans admired purple; and many a bright eye has been caught by the red of a soldier's coat. This arises from association, a thing very different from squares and triangles.

Expression is the last theory we will notice, because although there are others, yet this appears to combine all that the others contain. Expression, in the figurative sense it is used by Mr. Alison, in his

Essays on Taste, signifies that impression made on the mind of the beholder, calculated to produce emotion by any object. Now although we freely confess that we can entertain no notion of the beauty of an object without the perception of some such figurative expression, yet such expressions may cause a variety of emotions besides those that are beautiful. To mend the matter by saying that they must be pleasing and agreeable expressions to cause a sense of the beautiful, is only telling us that a beautiful object has a beautiful expression, which is the cause of a corresponding emotion of the mind; which is exactly what every one knows, without assistance from the philosopher. To transfer beauty out of the object, into the expression, will afford us no clearer idea of its nature, than if we had suffered it to remain unmoved. If we should define the expression of objects by what it really is, —viz.:—the rays of light proceeding from an object to the eye of the beholder, in the same manner that its analogue, an expression of the voice, is sound proceeding to the ear, it is clear that it is only a perception in the mind, and depends on the taste of the individual whether it is ugly or beautiful.

It thus appears that beauty is not more a quality in an object, than a quality of taste in a subject. To deny that beauty is in the object; and to affirm that it is only in the expression, or in the mind having a taste for such expression, is only introducing us to the old mazes of the ideal philosophy, which are calculated to involve us in difficulty, rather than to explain things intelligibly.

Seeing that no definition answers our purpose.

and preserving that unrestrained freedom in which we have roved throughout our whole subject, we will also venture on a definition, and follow it by a classification, which, we think, will answer our object, and may give satisfaction to our readers.

Beauty is that quality in an object which gives pleasure to a beholder. We make no distinction between the emotion produced by a single quality, or the united effect of several qualities; because it is a single emotion, whether produced by one or many causes or things. It is the same whether produced by one or many colors, features, or objects. We say it is in an object, because it originates with or by it, and does not exist out of it. Lastly "it gives pleasure to a beholder," because if it should give none it is no beauty to him. Not that beauty cannot exist without being, or until it is appreciated; for our appreciation of it is only the enjoyment of that which would have been the same, if we had never lived. The perception of it by the mind did not call it into being; but its being in the object is the cause of being perceived by the mind. It is mere hypercritical squeamishness to say that a quality cannot be in the mind, and in the object at the same time, We leave this to those who are fond of the idle pleasure of whittling things to a sharp point, without any other objects but to use a sharp instrument, and to make pretty shavings.

Having given this very general definition, our next endeavor will be to ascertain the objects of beauty. These we will class under two general heads—viz.: natural and artificial objects;—which

produce their effects by modes so very different that they cannot be classed together.

Natural beauty is that property of things of nature which produces agreeable sentiments. It does not depend upon any operation of the mind to enjoy this beauty; for although the mind is briskly agitated by it, it has nothing to do with its perception. It is purely a sentiment; for although a cultivated taste may perceive many delicate beauties which escape a person of less refinement, yet it arises from having a higher sensibility as a consequence, and not by the operation, of his greater mental capacity. It has no relation to utility or design; for whatever beauty relates to these, in natural objects, is of a mixed nature, composed of natural and artificial emotions. No person will stop to inquire into the utility or design of a beautiful landscape, a beautiful flower, bird, or animal, before he is enabled to express a decided opinion of its beauty. Indeed such questions never arise, but in insensible natures, or after admiration has, in a measure, subsided. The young man who can, upon seeing a beautiful woman, immediately describe her hair, eyes, forehead, nose, mouth, chin, &c., is in no great danger of his peace of mind.

Natural beauties are scattered over the earth with an unsparing hand by the benevolent Creator; and he has so constituted human beings as to have a keen relish for them, under all circumstances of barbarity or refinement. The savage who had been long in a prison, from whence he had escaped, no sooner feels security from pursuit, than his heart leaps with joy at beholding the beautiful scenery

which surrounds him, and the beautiful heaven above him. He communes with the trees, shrubs, and flowers, as if they were sensible of his joy, and delighted with his presence. He thinks they look greener, and more vigorous, because he is elastic and happy; and he bounds on over hill and dale, invigorated by the beauties successively displayed to him.

Artificial beauty is a thing of art displaying ingenuity or skill in its construction. Utility is not a necessary element of this beauty; for many of the most beautiful works of art are of no use, and many others are of less use than those less beautiful. Nor is design an essential requisite; for we may admire the skill of the artist, and ingenuity of the workmanship and condemn the whole as impracticable, or useless. Or all the parts may be beautiful, and the whole, when adjusted, ugly.

Utility and design, however, add especially to the beauty of works of art, as they sometimes do to natural objects, though always in a less degree. In natural objects not the slightest doubt is entertained that anything is made without utility and design. We are certain of it, however strange and unaccountable the thing may appear to us. The mind is at rest on this point; because the Being who made them, in everything we have yet discovered of *His* creation, has manifested these circumstances in the highest degree. Therefore, when we discover the design in *His* works, the pleasure derived from it chiefly arises from a consciousness of mental power, or pride, in the discovery; which is not, however, connected with any elevation of *Him*, in

our minds, for *His* skill and ingenuity, for we knew them to be boundless. Not so, however, with works of art, because we have no such confidence in the artist; consequently his skill and ingenuity are increased in our estimations, by a knowledge of the utility of the work, and his design in its construction. These circumstances are so closely connected with the beauty of the work, that, without distinguishing between the emotions, we readily transfer them to the whole, though in reality they are distinct. A design, because it implies a kind of creative power, which is never a subject of indifference, may be beautiful, or even sublime, even if it should not be put in execution, or should not be successful, if attempted; for it may have an intrinsic beauty, altogether independent of extrinsic circumstances. Utility is of more humble pretensions; for however admired for handiwork, she can never be deemed beautiful. Although she may contribute largely to the beauty or grandeur of a design, she is too modest to reserve any for her share. Nor can we perceive how she is entitled to any, as she is entirely passive in the hands of a superior agency.

But it is natural beauty which demands our exclusive attention. This we may divide into organic and inorganic; because the beauty of vegetables and animals is different from that of earths and stones. Not to detain our readers, we hasten on, without illustrations, to matters which directly relate to our subject. Organic beauty is again divisible into vegetable, animal, and human; each of which is as distinct from another, in the emotions experienced on beholding them, as the beings which

cause them. When the eye ranges over a fertile plain, with beautiful flowers sprinkled in rich profusion upon a carpet of green, bounded in the distance by an irregular fringe of thick forest, the mind dilates with the beautiful scenery pictured on the imagination. Suddenly, while enjoying this beautiful scenery, a herd of deer emerge from the forest; some quietly browse upon the herbage, while others gambol and frisk to and fro, in the fulness of life and pleasure; now approaching so near to the beholder, that he can discover their large lustrous eyes, and velvet coats;—and, anon, bound away, starting flocks of birds, which wheel in circles in the air; the charm of the first scene is immediately lost in the delight of the second. While following the deer and birds in their gambols, and gyrations, a company of beautiful girls burst from the forest;—their merry ringing voices startle the deer into stillness, as with gay and sprightly mirth they come bounding towards the beholder, unconscious of his presence, until they approach so near that he can compare their fair skins, red cheeks, and laughing eyes, with the lilies, roses, and blue-bells in their hands. He would be more of a Stoic than should belong to a man, if the deer, the birds, and the beautiful plain, were not lost to his sight, and his feelings were not absorbed by this crowning perfection of God's beautiful creation.

These three emotions are of very distinct natures. They differ not only in degree, but in kind. The charming prospect presented by the landscape, diffuses over the mind of the beholder, a gratifying and pleasing serenity, partaking of all the varied beauty

of the flowers, herbs, and trees, painted on his imagination. But the heart only partakes of this pleasure by sympathy with the mind; for there is nothing in it to call forth its emotions, unless it should be to adore *Him*, whose benevolence has so constituted human nature, as to be capable of enjoying the various scenery *He* has so profusely spread abroad. This feeling forms no part of the beauty of which we are speaking, and never arises until the imagination is satiated with enjoyment. But the spectator is immediately sensible of a new, and mixed sensation, when the deer and birds enter, in which the heart performs its share in the applause, not only from sympathy with the imagination, but by direct appeals to its own sensibility. The eye follows with delight their gambols and gyrations;—the heart beats quicker for the velocity, beauty, and grace of their motions, and it feels a deep interest for such beautiful creatures, so innocent, so endowed, and so enjoying themselves upon the bountiful provision of the Giver of all good. But the airy circles of the birds, and the gay gambols of the deer, immediately vanish from the eye and the heart, upon the entrance of the sprightly troop of girls, whose merry deportment and ringing laugh touch the keys of the heart with the free, bold, and skilful hand of a master. The heart now claims the entire man, and will suffer no divided empire with the imagination. If he is a young man he sees in the sprightly troop the objects of his romantic thoughts. He examines each with an emotion which shows the yearnings of the heart to fix its affections upon a help meet for it. But if he is a man whose head has grown hoary amidst

scenes of domestic happiness, his heart immediately leaps back to the time when he wooed and won the wife of his bosom, the mother of his children, and the sweet solace of his age; and he counts every one of them, with a fond hope that each will be a future wife, mother, and solace, in all the reality in which he has enjoyed these rich blessings. "Romp on! Romp on! my innocent cherubs," he exclaims "the time is coming when all of this buoyancy and exhilaration of spirits,—all this roguishness, frolic, and fun,—will give place to the far sweeter, but more sober happiness of domestic responsibilities and enjoyments. May each one of you get a husband whose moral and intellectual worth will develope more and more with age, that he may be able to substitute cheerfulness for your merriment, and make your old age green with love and happiness, because it has never been blasted by unkindness."

We have thus, by a somewhat long process, arrived at the point we have desired, viz.: that natural beauty is properly divisible into three distinct kinds, each of which is appreciated by different attributes and faculties. The pleasure derived from *inanimate beauty*, if not entirely belonging to an excited imagination, is certainly so dependent upon it, and so little indebted to the heart, that it may properly be called beauty of the imagination. *Animal beauty* is of a mixed nature, partaking of emotions of the heart, and imagination. But *human beauty*, if not entirely belonging to the heart, certainly owes to its deep emotions by far the greater part of the pleasure experienced. Imagination may have a share in it,

but it is so small as to be lost in the more deep and sober feeling.

But beauty might abound in the earth, if there were not sentient beings to perceive and appreciate it, it would "waste its sweets upon the desert air." The perception and appreciation of beauty is called by critical and rhetorical writers, taste; which is defined to be "the power of receiving pleasure from the beauties of nature and art." This perception and appreciation, in other words, this taste for beauty, is the only means we have of knowing that it exists; for however beautiful an object may be, it certainly has none for those who have no relish for it. Although, therefore, beauty and taste are as distinct as an apple and the relish for it, yet for all practical purposes the words are synonymous; in which sense we will use them, in our future speculations, unless when otherwise mentioned.

That "natural beauty operates in the same manner upon all human minds," is an assertion of the learned, which should be received with very considerable limitation. It may be more generally true in respect to *inanimate* and *animal*, than to *human* beauty; because, in regard to these, all men are constituted more upon an equality. All men live upon one earth, diversified with hills and plains, mountains and valleys, clothed with vegetation, intersected with streams, dotted with lakes, and surrounded by oceans. All have the beautiful blue expanse above them, with the sun, moon, and stars, producing life, abundance, and beauty, by their revolutions. Animals, of various kinds, everywhere abound, exciting admiration by the singular beauty

of their shapes, the grace and activity of their motions, and the beauty of their coats and plumage. But if taste is entirely dependent upon sensibility for its existence, there must evidently be an inequality between the different races of men, arising from the specific differences of their natures. Constitutional temperament, even in the same species, exercises a controlling influence over sensibility; how much greater must it be between those who have superadded to such a difference, the vast disparity which must subsist between specific differences, such as we have enumerated? Consequently, there must be a considerable difference between the species of men in regard to taste, or a relish for beauty, even in respect to those natural objects which are beyond their control, and, therefore, not the subjects of their passions; which is the case with nearly all of inanimate and animal objects. But in regard to those objects which are the subjects of passions, as well as of taste; and these passions as well as taste, being equally modified by constitutional temperament, it will readily be perceived, that the differences between the species will be much more considerable, than it would be in respect to natural objects, towards which the passions are but slightly, if at all, exercised. Human objects are, of course, more the subjects of passions than any others; and, consequently, specific character will be more developed in this particular, and espe cially in the sexual relations, than in regard to any other objects.

We have said that the relations of the sexes, in other words, the perception of beauty in the sexes, is the important law by which the species are kept dis-

tinct from each other. In vain would separate geographic regions have been assigned to each species; in vain would constitutional temperaments separate them in morals, intellect, and pursuits; if the sons and daughters of each species were equally "fair" to each other, they would take husbands and "wives of all which they chose;" and nothing short of another deluge could wash out the heterogeneous mixture, so productive of the corruption and abasement of mankind. We are inclined to believe that, during the Adamic period, all human beings were of one species, however different they were morally, and probably physically, in some slight degree, constituting varieties. And because they were so, it happened "that the sons of God saw the daughters of men that they were fair, and took them wives of all which they chose." But however this may be, it is very certain that, immediately after the flood, specific differences arose, which have continued to this day, without any general mixture by intermarriages, and without any alteration by natural generation.

Originally the species were not geographically separated as they are now, and have been for nearly twenty-five hundred years; for it is well known that, in Herodotus' time, and for some time afterwards, there were two Ethiopias; one in Asia, extending from the north part of the Red Sea towards the Euphrates, and the other in Africa, both inhabited by Negroes. At this time all the different races of men, except the Japhethites, of whom there is no evidence, inhabited neighboring regions of Asia. Consequently, it is fair to presume, that, if there was no natural impediment to matrimonial unions, the different species

would have amalgamated. We are aware that national differences, in the present condition of society. operate powerfully to prevent any general connubial connections between the people of different nations; but national differences in the ancient patriarchal days, of which we are speaking, were remarkably weak compared with the present condition of society. Taste, or a relish for beauty, was then in its original, unimproved condition; whereas now it is cultivated, at least in the Shemitic species, in a very high degree. The Canaanites of that period appear also to have been as highly improved, morally and intellectually, as any other species. Consequently taste must have been the chief guide of the parties in their connubial selections. In its original unimproved condition, therefore, by the mere operation of the natural law upon the heart, alliances between the different species were unsolicited or rejected, to any extent endangering the integrity of either. The law still operates with the same power it did then. The Moors of the Zahara,—the Tartars of India and China,—continue as distinct from the people with whom they mix, as they were centuries ago, when they first mingled with them. In the Shemitic species additional weight is added to it, by the improvement of the attributes and faculties, and consequently of taste for sexual beauty.

In our future speculations upon this subject, we propose to treat of the sexual relations, so far as they relate to the specific differences of man, under the following heads—viz.:

First.—That the standard of beauty in the different species of man, is wholly different, physically,

morally, and intellectually. Consequently, that taste for personal beauty, in each species, is incompatible with the perception of sexual beauty out of the species.

Secondly.—That the law of the moral and intellectual improvement of man is inoperative upon those species which do not permit the freedom of selection, or rejection of matrimonial connexions to the male and female.

Thirdly.—That by freedom of selection or rejection, enjoyed by both sexes, all the high attributes and excellences of the human heart and intellect are developed; and that each advance in improvement is but a preparation for another.

Fourthly.—That matrimonial connexions are more frequently made between parties, from a natural consciousness of deficiencies, or wants, than from a reference to any standard of beauty.

Fifthly.—That within the circle of each species, crosses of individuals of different temperaments are highly beneficial; but out of this circle, crosses of individuals of different species are always prejudicial.

Sixthly.—The opinions of some philosophers, who think that the race would be improved by uniting the sexes according to the artificial rules established to improve domestic animals, is contrary to a law of our nature, and would, if it could be carried into effect, inevitably cause the degeneration of the race.

These are all deeply interesting topics, which cannot be slightly considered, if we desire to present a correct outline of the natural history of man. We may, in some instances, touch on subjects already

discussed; but the specific tastes for sexual beauty, and the sexual relations founded on them, constitute the basis of the history of man. We will discuss these subjects as concisely as possible to give a clear view of them.

The first position is—"That the standard of sexual beauty in the different species of man is wholly different, physically, morally, and intellectually. Consequently, that the taste for beauty, in each species, is incompatible with the perception of sexual beauty out of the species.

We have already said that there is no actual standard of human beauty, but there is an imaginary standard in each species, which a majority of such species will acknowledge to be beautiful. The standard of beauty of a Shemitic female may be thus described:—

Height five feet five or six inches; complexion fair and clear; hair light brown or auburn, fine, abundant, and curling; forehead capacious and smooth; eyebrows thick, narrow, and arched; eyes blue, large and intellectual; nose fine Grecian; mouth small, corners turned slightly up, with lips full and red; face small, oval, without prominent cheek bones; chin small, as prominent as the lips, and slightly dimpled; neck slightly swan-like, full at the bust, round, smooth, and tapering to near its junction with the head; the shoulders finely turned, with a graceful sweep; the arm finely rounded, and tapering gradually to the wrist, notwithstanding the sinuous line upon its surface; the hands small, fingers tapering, slightly dimpled over the joints, and rosy at the tips; the bust, full, spreading, and promi-

nent; waist moderately small, tapering from the hips up; hips capacious; feet small, finely turned, with an elevated instep; carriage slow, dignified, and graceful; the expression self-possessed, easy, modest, and intellectual; and the whole figure giving evidence of high health, a vigorous constitution, and a slight tendency to increase of flesh.

The standard of beauty of a Shemitic male may be thus described.—Height six feet; hair dark brown, abundant, and strong; forehead high, broad, and full; eyebrows thick, strong, and linear, descending a little at the nose; eyes dark, large, intellectual, and penetrating; nose prominent, slightly aquiline, somewhat full in the nostrils; mouth medium size, corners slightly inclining down, lips full and slightly compressed; face small; cheeks full, but not oval, with slightly prominent cheek bones; chin full, smooth, and finely turned; neck medium length, full, and square shaped; shoulders broad, and terminating with an obtuse angle; the arms stout, brawny, but tapering to the wrist, which should be of good size, but not large; chest very deep, prominent, square, and tapering downwards; loins small, but wall-like; hips small, but firm; legs muscular, and set firmly perpendicular under the hips; knee bones rather small, and the calf not encroaching on the joint; foot of good size; finely turned, and elevated instep; the carriage quick, but dignified and firm; the expression easy, self-possessed, intellectual, decided, and prompt; and the whole figure giving evidence of high health, a rugged constitution, with no tendency to increase of flesh.

The standard of Ishmaelitic beauty is much more

difficult to describe; which arises from the circumstance that in Turkey, Persia, and all their large nations, their extreme tyranny and jealousy compel all who can afford it, to supply themselves with foreign females, chiefly Caucasians. This has given rise to a factitious taste, which originated in their fears of domestic discords, and has now prevailed so long, and so extensively among the wealthy, that it is difficult to describe accurately what constitutes the standard. One great feature, however, pervades them all, from the Moor of Sahara, in Africa, to their kindred roving robbers at the foot of the Altai mountains, in Asia. This is a voluptuous expression, in some form, whether exhibited in the camel load of flesh in the girl of the Sahara, or the impassioned gazelle-like eye, and supple figure, of the girl of Asia. With scarcely an exception, sentiment forms no part of love with any of the dark races. It is altogether a voluptuous passion, varied in its modifications by the physical organization and specific temperaments of the different races; but in none of them exhibiting that lofty, chivalrous and pure sentiment, so universally prevalent among Shemites. The opinion universally prevails among them, that women are an inferior, degraded class of beings, made to minister to the men in the most abject and servile manner.

Mungo Park, speaking of the Moors of the Sahara, in Africa, says:—"The education of the girls is neglected altogether; mental accomplishments are but little attended to by the women; nor is the want of them considered by the men as a defect in the female character. They are regarded, I

believe, as an inferior species of animals; and seem to be brought up for no other purpose than that of administering to the pleasure of their imperious masters. Voluptuousness is, therefore, considered as their chief accomplishment, and slavish submission as their indispensable duty."

He thus describes the standard of beauty among the Moors. "The Moors have singular ideas of feminine perfection. The gracefulness of figure and motion, and a countenance enlivened by expression, are by no means essential points in their standard; with them corpulence and beauty appear to be terms nearly synonimous. A woman of even moderate pretensions, must be one who cannot walk without a slave under each arm to support her, and a perfect beauty is a load for a camel. In consequence of this prevalent taste for unwieldiness of bulk, the Moorish ladies take great pains to acquire it early in life; and for this purpose, many of the young ladies are compelled by their mothers to devour a great quantity of kouskous, and drink a large bowl of camel's milk every morning. It is of no importance whether the girl has an appetite or not; the kouskous and milk must be swallowed, and obedience is frequently enforced by blows. I have seen a poor girl sit crying, with the bowl at her lips, for more than an hour; and her mother with a stick in her hand, watching her all the while, and using the stick without mercy whenever she observed that her daughter was not swallowing. This singular practice, instead of producing indigestion and disease, soon covers the young lady with that

degree of plumpness, which, in the eye of a Moor, is perfection itself."

Finish the above beauty, as Mrs. Childs has, by giving her "an oily skin, teeth projecting beyond the lips, and pointed nails an inch long," and we venture to say there is not much to fear from such a beauty interfering with any of the Shemitic belles.

The Ishmaelitic Asiatic standard, although formed upon the same voluptuary principle, is of an opposite kind. Their complexion is lemon colored. The female standard of beauty is as follows for an Arab belle: "Her eyes are black, large, and soft, like the antelope; her look is melancholy and impassioned; her eyebrows are curved like two arches of ebony; her figure is straight and supple as a lance; her step is like a young colt; her eyelids are blackened with kahol, her lips painted blue, her nails stained a gold color with henneh, and her words are sweet as honey."

But it is not necessary to follow the variations of taste in the various tribes, which belongs to a history of the species and its varieties, and not to our plan. An Ishmaelitic beauty is never valued for her mind, unless it is displayed in constantly varying her blandishments towards her master. The most perfect beauty of them all, and the most perfect mistress of voluptuary art cannot hope to attract attention longer than a few years; for they only hold their places by the slender tenure of a capricious libertine's passions, over whom there is far less restraint, morally and legally, than there is over the small, but despicable and abandoned class of our own men about town. Consequently great pains are taken to educate them

in those seductive and voluptuous arts which are the only accomplishments in the eyes of an Ishmaelite, to the entire neglect of the high, pure, unimpassioned, and lady-like finish of deportment and manners so essential to a Shemitic beauty.

There is no standard of beauty of an Ishmaelitic male as it regards their sexual relations; for, with the exception of the Courds, there is not a tribe among them in which the female is permitted to have the free disposal of her own person. She is every where property to be sold to the highest bidder, with as little scruple as they sell a horse. Therefore, the blind, the lame, the youth, and the aged, the tall and the short, the ugly and the handsome, are all on a par, if they have wherewith to buy. But although there is no standard of beauty of the males, as it regards the females, yet a general description of their persons is necessary to show that they differ materially from the standard of the Shemitic species, and the descriptions of others, by which they have been kept a distinct people. We select the Arabs and Toorks or Turks as our examples. The Arabs are of small size, spare, and even meagre. They are less distinguished for strength than extreme agility. Their complexion is sallow; a defect which some endeavor to cover by staining their whole body of a brownish yellow color with the juice of the plant henneh. Taciturn, gloomy, and ascetic in their habits, they have nothing of that bland courtesy of manners which could recommend them to the favor of ladies. In their intercourse with each other they are proudly ostentatious, and

coldly ceremonious, and the polishing influence of woman they never experience.

The Toorks, or Turks are the handsomest of the Tartar, or Ishmaelitic tribes. Their complexions are clearer and more ruddy. "They have short and stout persons; broad foreheads, high cheek bones, small but not twisted eyes, and black hair." Their manners and habits are of the same gloomy, austere, ostentatious, and ceremonious kind which characterize the whole of this race, except the Persians, who are said to be the Parisians of Asia.

The standard of beauty of the Japhethites is very little known, as well owing to the very slight intercourse between them and foreigners, as the rigid exclusion of all of their females, except those of the lower orders. Enough is known of them, however, to be enabled to say that they are smaller than Europeans; have broad vacant faces; an expression of fretfulness and discontent; eyes, small and lively, what are usually denominated pig eyes, placed obliquely in the head, with eye-lids half closed and rounding into each other at the corners, not forming angles as in the Europeans; lips thick, pouting, and rosy; complexion sickly white, or pale yellow, like a faded leaf, or a root of rhubarb; hair universally black and strong; and above all, feet unnaturally small, compressed by art.

There is no Japhethic male standard, in relation to the females, for the same reason that there is no male standard of beauty among the Ishmaelites. Women have no voice in their matrimonial connexions, being entirely passive. The males and females are not distinguished by those strong contrasts

which usually mark the sexes in other species. In delicacy of feature and expression, the females have little, if any, advantage over the males; and the air of good humor and courtesy which generally appear in the male, are wanting in the female. The male Japhethite has, what we regard, a feminine appearance. "The broad, irregular, half closed eye; the linear and highly arched eye brow; the broad root of the nose; the extension of the upper eye-lid a little beyond the lower; the thin straggling beard, and the body generally free from hair; a high conical head, a flat triangular face," and high cheek bones, constitute their general appearance. Their whole persons are deficient in that square angular form so essential to strength and endurance. Their necks have a feminine smoothness and roundness, though larger than is consistent with feminine beauty; and their shoulders, arms, hands, and chests, belong decidedly more to the feminine, than the masculine form.

There are many varieties of this species of men, who differ in some particulars from the above descriptions; but it is sufficiently accurate to cover the whole of them, in a general sense.

The standard of beauty of a female Canaanite may be thus described. Height the same as the European; hair black, wiry, and knotted; complexion black, shining, and oily; skin very soft and velvet like; forehead low, narrow, and retreating; nose flat, broad, and running into the cheeks; eyes small, black, and lively; face broad with high cheek bones; mouth large, with very thick lips, particularly the upper one; chin small and receding; bust large,

and the figure gross; feet large, flat, long heels, and low instep; expression moody and sulky, or mirthful and merry, but not intellectual.

Like all of the dark races there is no standard of beauty in the males of this species, in their sexual relations. The women have no choice of husbands, and polygamy, in its utmost latitude, universally prevails.

There are several varieties of the Canaanites who differ as much from each other as the varieties of other species. On the one hand, the Foolahs and Wolofs are said to be the handsomest, and the Bosjesmen and New Hollanders the ugliest.

It is strikingly obvious, upon merely reading the traits which constitute the standards of personal beauty of the different species, that they present insuperable bars to an amalgamation to any extent sufficient to endanger the integrity of any one of them. The horse and the ass, the lion and the tiger, the hyena and the wolf, the goat and the sheep, are not more distinct in their species, their sexual relations, and their tastes, than the different species of the human family.

It would be a strange perversion of taste for a Shemitic male, with his peculiar constitutional temperament, to prefer a matrimonial connexion with an Ishmaelitic female, instead of one of his own species. If he could put up with her complexion, and should select an Arab beauty whose form corresponds more with his own species, her dark and impassioned eyes, and voluptuous deportment, devoid of intellect and refinement, would fail to make a deep impression upon a majority of Shemitic men.

They would turn with delight to their own modest, sentimental, pure, and apparently cold beauties, who are to be won by assiduity, and warmed by tenderness. Whose beauties of person, superior as they are, constitute less than half of their attractions; whose nice sensibilities, pure hearts, and high spiritualities, would cause them to turn, with disgust, from the men who seek them alone for their persons; whose whole delight, in matrimony, is to be the partners of their husband's joys and sorrows, equal sharers for weal and woe in all that concern them, and mistresses of their affections.

Nor would Ishmaelitic males be more likely to prefer Shemitic females of pure type. Their arbitrary, taciturn, gloomy, and callous tempers, could not be aroused by the modest and retiring beauties of such women. They could see no intellect in their charms, no spirit beaming from their countenances, because they have no responding intellects and spirits in their natures. Shemitic females are consigned to such a destiny; but they are all Caucasians, who are trained, from infancy, for the harems of the callous beings for whom they are designed. Nor would they be acceptable to them without such an education. A pure Shemitic woman, with her icy coldness, her abhorrence, her sighs, tears, and melancholy, under such circumstances, however beautiful, would not long form an attraction for a man whose despotic will is the arbiter of her fate.

Taking into consideration all the circumstances attending the vast differences between the species, physically and spiritually, we cannot believe it to be possible that a free and unbiassed choice of one spe-

cies by another, would ever be made upon principles of affection and love. It is entirely out of the question by persons of a healthy taste; therefore, whenever it occurs, if it should, it is an evidence of a diseased and depraved appetite, similar to the diseased natural appetite which physicians call *bulimia* or *pica*. None but a Japhethite could see beauty in the rhubarb complexion, unmeaning face, and oblique pig eyes, of a Chinese belle. And surely none but a Canaanite could discern beauty in the knotted, wiry, crisped hair, high cheek bones, black, glossy skin, broad, depressed nose, receding chin, and projecting jaws of an Ethiopian. That they are equally disgusted with our color and features is evident from what is told by Clapperton, Park, Adanson, and indeed every other traveller among them. The women approached the travellers with a shudder, and the children ran from them in fright. They counted their fingers and toes, to be assured that a man with a white skin was a human being; and the color of Park's eyes was so objectionable, that it was proposed by the sons of the king of Benowne to put them out, because they resembled a cat's. Upon being exhibited as a curiosity to the wives of the king of Foola, "they rallied me," says he, "with a good deal of gaiety on different subjects, particularly on the whiteness of my skin, and the prominence of my nose. They insisted that both were artificial. The first, they said, was produced when I was an infant, by dipping me in milk, and they insisted that my nose had been pinched every day till it had acquired its present unsightly and unnatural conformation. Without disputing my own deformity, I paid

them many compliments on African beauty. I praised the glossy jet of their skins, and the lovely depression of their noses; but they told me that honey mouth was not esteemed in Bondu."

Burkhardt, in his Travels in Nubia, pp. 366-7, says—

"The caravan halted near the village, and I walked to the huts to look about me. My appearance on this occasion, as on many others, excited an universal shriek of surprise and horror, especially among the women, who were not a little surprised at seeing such an outcast of nature—as they considered a white man to be—peeping into their huts, and asking for a little water or milk. The chief feeling my appearance inspired, I could easily perceive to be disgust; for the negroes are all firmly persuaded that the whiteness of the skin is the effect of disease, and a sign of weakness; and there is not the least doubt that a white man is looked upon by them as a being greatly inferior to themselves. At Shendy, the inhabitants were more accustomed to the sight, if not of white men, at least of the light brown nations of Arabia; and as my skin was much sun burnt, I there excited little surprise. On market days, however, I often terrified people, by turning short upon them, when their exclamation was,—God preserve us from the devil. One day, after bargaining for some onions with a country girl in the market at Shendy, she told me, that if I would take off my turban and show her my head, she would give me five more onions: I insisted upon having eight, which she gave me; when I removed my turban and showed her my white closely shaven crown: she started back at the sight. And when I jocularly asked her whether she would like to have a husband with such a head, she expressed the greatest surprise and disgust, and swore she would rather live with the ugliest Darfour slave."

Having heretofore said so much respecting the moral and intellectual differences between the species of men, we think it unnecessary to do more than to recal to the minds of our readers what we have said on these subjects. But it is evident that moral and intellectual qualities constitute the highest charm of beauty, to an exalted mind. Delicacy of organization, grace, and dignity of manners, a lively imagination, a sweet temper, a benevolent heart, and a strong intellect, are qualilties which will make a matron more lovely than a maid, without them, with the most symmetrical features and person. Such quali-

ties give a brilliancy and an elegance to features and persons which have no claims to artistical beauty, and, compared with whom the perfectly symmetrical beauty without them, is a statue demanding criticism, but not a woman commanding love. So, on the other hand, the morals and intellect of the male constitute his highest charms with a refined woman. Whatever may be his form and features, if he has a lofty, self-possessed, and dignified carriage, a benevolent heart, an intellectual face, and a fund of good sense, he is more likely to win the love of such a woman, than his more symmetrical but less noble rival.

These are the qualities of the species which appear to be designed by the Creator to be progressively developed, to carry mankind to the ultimate perfection of their natures. That the design may be certainly fulfilled, *He* has made the outward form and features always the true index of the soul: and *He* has so ordained the law of love that it shall be obedient to the temperaments of the individuals, and the sexual indices by which *His* ultimate designs are to be carried into execution. That so large a proportion of mankind, those composing the dark races, should be wholly, or in a great measure, regardless of this law, apparently by a law of their constitutions, is one of the mysteries of His providence, probably yet to be revealed. We only know the fact, that so it is, and so it has been from the remotest antiquity. From the earliest times, and in their rudest conditions, the different races of men have always been governed by different principles in their sexual relations. The results of their different conditions, as

well as the declaration of the divine word, prove which is most productive of benefit to mankind.

The next subject in order is our second position. Although this and the third are really distinct from each other, and are, therefore, so stated, yet as we desire to abbreviate as much as possible, we will consider them together. They might be advantageously considered separately; but according to our general plan of investigating the subject, the two positions will illustrate each other, and be at the same time distinctly understood.

The second proposition is—"That the law of the moral and intellectual improvement of man is inoperative upon those species which do not permit the freedom of selection or rejection of matrimonial connexions to the male and female."

And the third is—"That by freedom of selection or rejection, enjoyed by both sexes, all the high attributes and excellences of the human heart and intellect are developed; and that each advance in improvement is but a preparation for another."

The fact that all of the dark races of men have, from time immemorial, remained stationary, or retrograded, in moral and intellectual condition, is beyond dispute. We know of none of them which has advanced since the historic period; and we know of one, if not two, which has retrograded. This is one of the most singular features in the natural history of man. That over 600,000,000 of human beings should, for so long a period, be permitted to remain stationary, or retrograde, in everything which gives dignity and character to human nature, is a most remarkable circumstance in the providence of Him

who made and governs them. But this subject has already been discussed, in a summary way, in a former chapter; the question for consideration here is the influence of the sexual relations upon the destiny of man.

Independently of Scripture, we have the strongest possible testimony in the nature of men and women, that polygamy is an unnatural relation of the sexes. We have no reason to suppose that the desire for matrimony is stronger in the one, than in the other sex. It is, therefore, an unnatural arrangement which places the female, in a great measure, out of the enjoyment of marital rights, while the male enjoys unbounded liberty. The happiness of the female was certainly designed by the Creator to be equal to that of the male, and made to depend essentially on the same principles. Therefore, if man derives happiness from the thousand little attentions and delicacies of woman; from a constant and uninterrupted intercourse with her; from her constancy, devotedness, and exclusive affection for him; from her care, attention, and love of their children, will not woman also derive happiness from a return of all these things to her? Is she required, by nature, to pour out the treasures of her natural wealth, to gratify a man who can give her only the poor equivalent of a brutal passion, divided among many, without any of those delicate tendernesses her nature requires?

The births and deaths of males and females, in monogamous countries, are about equal, and appear to be decisive on this point. If it was the design of the Creator, that one man should have many wives,

the proper proportion of females would be born to supply the number, both in monogamous and polygamous countries. It is impossible to suppose that nature has erred in this respect; and without supposing that she has erred, it is impossible to suppose polygamy to be beneficial to man, or promotive of his happiness. That she has not erred is evident from the fact that men and women are so constituted that they have equal desires, equal enjoyments, and reciprocal expectations, in matrimonial connexions. Consequently, wherever they are curtailed of these natural rights, women manifest the tyranny exercised over them in all of their deportment and conduct. It is for this reason that the passionate and voluptuous deportment of the Ishmaelitic, and the querulous and dissatisfied appearance of the Japhethic women, require the rigor of their laws and customs to avoid the jealousy of their tyrants.

We have said that the births and deaths of the sexes in unigamous countries are about equal. Not so, however, is it in countries where polygamy prevails, in which more females are born. The cause is apparent in the habits and constitutions of the people. And the same causes operate with less force upon the Ishmaelites and Canaanites, than upon the Japhethites; because the quiet, passive, and confined employments of these people, compared with the more active, exposed, and predatory habits of the others, dispose them to effeminacy, exclusive of their sensual indulgences. To such an extent does it prevail, throughout the whole Japhethic race, that, notwithstanding the number of wives each takes, who

can afford it, female infants, to the number of many thousands, are annually destroyed, because they are in excess beyond the demand.

We may safely rely upon history for the fact that all those people who have always remained stationary, or have retrograded in moral and intellectual improvement, are polygamous, and do not permit the freedom of selection or rejection to both sexes. Political causes, or great national misfortunes, have undoubtedly caused some particular nations of a particular species, to retrograde from the moral and intellectual position they formerly occupied. The Greeks are a striking example. It may also sometimes happen that a great revolution may take place, by commerce, or some great discovery, which may effect such a change that another nation may more rapidly advance than the one which had before been most in advance. Such is Great Britain now, compared with any Shemitic nation; and such, we confidently believe, is the destiny of these United States before another century shall have elapsed. But such partial changes do not characterize the whole species, and the injuries experienced by such revolutions are never of that palsied and hopeless character, which always attends those bodies whose functions are diseased in the vital organs. Such are those whose sexual relations are disordered.

There is no natural law which appears to be more fully established, than that children inherit from their parents their physical, moral, and intellectual properties: and that such properties become more firmly established in proportion to the number of generations through which they have descended.

How important, then, is it, that parents should be in a sound and healthy condition, in all of these particulars, to transmit at least, sound and healthy organs and attributes to their children for development. But how is it possible that such should be the case, when one parent is a sensual, arbitrary, and tyrannical debauchee, desiring nothing but the gratification of his own passions and instincts; and the other parent is a slave and a prisoner, whose whole aim in life it is to minister to such passions and instincts, at the lavish expense or bankruptcy of the whole treasure of the heart, and the destruction of every chaste, delicate, and elevating quality, which so peculiarly adorns the female character? And what hope can be rationally entertained of any speedy improvement of a generation, whose temperaments, habits, and uncultivated attributes, have been confirmed in their present conditions, by a series of generations, for at least three thousand years?

So much information has been laid before the public, within a few years, in proof of the hereditary transmission of moral and mental attributes to offspring, as well as physical organization, that we think it unnecessary to give examples or quote authorities for its support. Physicians, in their treatment of diseases, always have reference to hereditary influences in certain derangements of the mind or body. Life insurance companies, with a prudent regard to the risk undertaken, always inquire into the hereditary constitutions of the family, as well as the physical condition of the applicant. All phrenological authors teach that mental, as well as physical

organs and powers are propagated. Mr. Walker, in his anthropological works, teaches the same facts. If our memory serves us, for we have not his works by us, he mentions a circumstance relating to Mr. Knight, the celebrated English stock breeder, who, at a public parish school, distinguished the natural children of well bred men, by their natural graces and quickness of mind, from the pauper children of unimproved parents, both having had the same treatment and education from infancy. Dr. Prichard, Mr. Lawrence, and other writers on the natural history of man, also furnish examples of the truth of this law. "Men," says Dr. Watts, "take their principles by inheritance, and defend them as they would their estates, because they are born heirs to them." We think it, therefore, unnecessary to occupy the time of the reader with examples or authorities to prove that children inherit the properties of the parents. A difference of opinion prevails in regard to which parent has the most influence in propagating moral and mental powers. Mr. Walker says, that in all cases, one parent gives to progeny the vital organs, and anterior brain, or moral and intellectual powers; and the other the locomotive, or bony frame, and the posterior head, or organ of will; consequently that it depends on the condition of each parent, which confers the moral and intellectual attributes, and which the organs of will, and animal instincts and propensities. And as the male parent, generally, has the most vigor of constitution, that he gives the will, and the mother the moral and intellectual powers generally. Others maintain that the male parent is most instrumental in bestowing

the characters and qualities of offspring. Upon this opinion is founded the whole theory and practice of breeding domestic animals among European nations. The Arabs, however, who are celebrated for their breed of horses, depend more on the female than the male. No money will buy from them a mare of high blood; but they part with their horses without much reluctance. In a subsequent part of this chapter we will have occasion to consider the analogies drawn from the animal kingdom to illustrate the sexual relations of man, and, therefore, will not now anticipate the subject; but we may say, what is undoubtedly true, that the moral and mental character of the mother is more frequently transmitted than that of the father. This has been frequently remarked, as well in regard to great endowments, as to great deficiencies. There have been very few great men in the world whose mothers were not remarkable for similar characteristics; and the remark is equally trite, that eminent men often have children who are not distinguished for like powers. It is not important to investigate this curious matter, as our purpose is sufficiently answered by considering both parents equally efficient in imparting moral and intellectual character to offspring. This we, may safely assume to be true. How is it possible then, that in species of men which invariably consider women as slaves; which never cultivate their minds; never suffer them to enjoy the invigorating delights and expanding influences of social sexual intercourse, to soften the manners, and to give delicacy and vigor to the mind; which expects nothing from them but animal qualities; which impose upon

them the duties of mothers before they have ceased to be children; we ask, how is it possible that their children should exhibit any of those high spiritual qualities which adorn human nature?

"May we not," says Johnson, on Tropical Climates, p. 416, "attribute the premature decay of native women in hot climates, to the long established custom of early marriages in that sex, originally introduced by the despotism of man, but which has now effected an actual degeneracy in the female part of creation. It is a disgrace to a woman not to be married before twenty years of age; and we often see wives, with children at their breasts as soon as they enter their teens. I have no doubt that, to the continued operation of this cause, through a long series of centuries, is owing the deterioration in question; for it is not conformable to the known wisdom of the Creator, that such an inequality should naturally exist between the sexes." It is undoubtedly one of the causes to which "the deterioration in question" may be ascribed; but it is far from being the only, or chief cause, which has produced the deterioration morally, mentally, and physically, although it must have contributed its share towards them all.

But the debasement of the women, although it is the chief cause of the degradation of the men below the natural standard to which they might aspire; and although it imparts to their natures those stubborn qualities which have become engrafted on their constitutions by a long series of generations; yet, as we have before said, this cause was produced by the more remote cause of the specific constitutional

differences in the races, which caused the different sexual relations. It is highly probable, however, that the character of women, in the dark races, has long since suffered all the deterioration to which it is liable from the operation of existing causes.; because they have been operating for so many ages they must have become constitutionally adapted to their condition, as perfectly as the human constitution can conform to so unnatural a state of things.

Nothing has so expanding an influence upon the morals and intellects of young persons, of both sexes, just budding into life, as social sexual intercourse, restrained only by those regulations imposed by society, to prevent indecorum. Prior to a certain age girls are contented with dolls, and boys with marbles; but no sooner does the proper age arrive, than dolls and marbles are discarded, and the girls and boys who before romped together with all the freedom of identity of sex, assume a new attitude towards each other marked by timidity and deference. They suddenly become new creatures, without knowing why. They have new thoughts crowding on them, presenting gay and splendid visions of the future, in which the affections of the heart are always prominent features. We do not mean to say that they are conscious of the impulse which prompts these emotions; for, in general, the whole beginning of the process is carried on, if not without their consent, certainly without their assistance. It may, if unnaturally checked, become morbid, by being brooded upon in secret, and it then becomes dangerous to the health as well as the happiness of the individual; but like most young things, it grows

vigorously and healthily, when supplied with proper food, and exposed sufficiently to free exercise in the sun and air. These are furnished by social intercourse, restrained only by what is proper for preserving sound morals and sexual decorum. It is now that the principles of good taste, moral and intellectual, which have been taught to them are brought into activity. They constitute a kind of standard by which the persons with whom they associate are measured; and their partialities and prejudices are the joint results of their constitutions, and the training they have received. Girls are angels, and young men Hectors and Solomons only as they conform to this standard; and a free sexual intercourse is the only means to destroy that romance of feeling between the sexes, which would prevent proper discrimination in affairs of the heart. Familiarity, in this matter, never breeds contempt; but it destroys, by degrees, the novelty and violence of feelings which might otherwise stifle the slower, but equally important movements of the judgment.

It is at this time of budding maturity that the noble sentiments of human nature are first called into activity; as if all the dignified and noble principles of humanity were but humble attendants upon the formal introduction of the sexes to each other. Selfishness before ruled supremely. She now no longer rules except in beings nature has given up to blindness "of mind and hardness of heart." It is now that the girl steps with the conscious pride of woman, and the boy with the dignity of a hero or a sage. A new world has burst upon them; and as in infancy they were pleased with brilliant objects and boister-

ous mirth, so, in the infancy of maturity, they are pleased with the gay visions of fancy, and the bustling activity of the new world just opened to them. Human beings may be said to be subject to two births, each equally important. The first birth is merely that of an animal, having certain moral and intellectual capabilities; but the second is a spiritual birth, when all the nobler qualities of human nature are called into activity. The abandonment of selfishness is, probably, one of the first evidences of this second birth; and it is immediately followed by the eager exertions of each sex, to acquire those manly and womanly qualifications which may recommend them to one another. The higher, more moral, and more intellectual is the standard of qualifications, so will be the exertions to attain it; and singular as it is, it is no less true than singular, that, in a general sense, it is the province of woman to fix the standard in which she is so deeply interested. Her interest and duty require it to be fixed at the highest possible point at which the current condition of society will admit.

The manners of a people depend chiefly, if not altogether, on women; and manners are much more important influences upon the destinies of a people than is commonly imagined. The mere polish of society has a powerful influence upon the direction of morals and mind. The English, French, and Germans, are highly polished, but each differently; and each exhibits a peculiar character conformable to it. We are aware that the women of every people have a constitutional character similar to that of the men, to which their manners must

conform; but there is a grace, a delicacy, and an intuitive perception in women, in the exercise of the social virtues, which place them always in advance of the men. Therefore, although it is impossible for women to change the constitutional character radically, yet they improve it so much in all its points, rub off so many asperities, and give it so much vigor and elasticity, that, although it remains fundamentally the same, it has so much the appearance of a new character, that it requires a critically accurate and acute judgment to discover its identity. Some of the highest of the human attributes they possess in a higher degree than men. Adoration and benevolence are more emphatically female than male virtues. Our own experience teaches us this truth of our own people; and our missionaries and travellers tell us the same things of others. Ledyard, Park, and others, speak warmly of the benevolence of women universally; but when our sex get any such praise, it is mentioned to the honor of the individual, as an exception to the class.

It is, however, estimating the influence of women too low to attribute to them only the power of softening, and polishing the manners of men. Either directly, or indirectly, they draw forth our most noble qualities, particularly in early life. Young men dare everything, attempt everything, and execute everything, more frequently in reference to the sex, than from any other motive. Young women are keen and intuitive observers of the qualities and powers of young men. Whatever qualities the state of society most requires will be most appreciated. A society surrounded by dangers requires

statesmen and warriors; a community in peace and security requires statesmen, civilians, merchants, men of science, &c.; and it is surprising how intuitively women discover the requisite qualities in young men, often before the wisdom of experience has supposed them to exist in the individuals. There is a kind of freemasonry between the sexes, which indicates to each a knowledge of the other, which is more perfect in early life than at an advanced age. Sometimes they err; but not as often, when the whole design of matrimony is taken into consideration, as the extreme prudence of aged friends imagine. The errors of a free choice are, on the whole, fewer, and attended with less pernicious consequences than when selections are made upon calculations of jointures and dowries, or the still worse principle of congeniality of tempers and dispositions, which we will attempt to show in the proper place.

But it is not only as our mothers and mistresses, that women give birth to, and call into activity, our highest moral and intellectual powers; for, as nurses of our infancy, they have the training of our morals, the superintendence of our educations, and the establishment of our early habits, all of which constitutes the foundation of our future characters and pursuits. We have somewhere read that our tempers might as well be called mother tempers, as our language mother tongue; and that it is as difficult to forget the one as the other. The comparison may with propriety be extended; for as it is next to impossible for any one to acquire another language, so as not to betray the accent and idiom of his native

tongue, so is it next to impossible to acquire new habits and tempers, so that we will not betray those we have acquired in the nursery.

If what we have said of the influence of woman, when in the full enjoyment of her natural rights, is correct, it is not difficult to see the reason for the great disparities of condition in the different species of men. The natural constitutional temperaments of the dark races, unassisted by the refinements and stimulants of sexual influence, have carried each species to a certain point, where they have remained. Beyond this point they cannot go, because "the law of the moral and intellectual improvement of man, is inoperative upon those species who do not permit the freedom of selection or rejection of matrimonial connexions to the male and female."

So, too, the reason for the great moral and intellectual improvement of the Shemitic species is apparent, because the natural constitutional temperament is assisted by the refinements and stimulants of female influence. With this species only, is the "freedom of selection or rejection enjoyed by both sexes." With this species, only, "all the high attributes and excellences of the human heart and intellect are developed; and this species, only, gives evidence of the constant and continued progress, by which "each advance in improvement is but a preparation for another." We are far from thinking that our species has yet received the full benefit of this influence. It is but recently that proper attention has been paid, even in this species, to the right education of females. The idea has too much prevailed that a thorough education and good house-

wifery, are incompatible. We do not see the necessity for such incompatibility, except when the instances are so rare, that a little vanity, sometimes inseparable from the highest intellects, unconsciously mixes with the character of such women. Not more, however, than may be discovered in many young men, who may be equally said to be unfitted for the every day purposes of life by "a little learning." The remedy for both is to give them enough of it to enable them to discover how little they know, compared with what they might acquire. The remedy, particularly for women, is to make it so general, that very few will have cause to be vain of it, but all will feel ashamed who are deficient. Many important advantages would accrue to society from such a course. The most immediate would probably be, that young men would apply themselves more diligently to their duties, without the reprimands of faculties or fathers. But the most important would probably be, that comparatively few improper matches would be made, and the next, and every succeeding generation would come into the world with higher moral and mental capabilities.

The next proposition for consideration is—"That matrimonial connexions are more frequently made between parties from a natural consciousness of deficiencies, or wants, than from a reference to any standard of beauty."

This proposition necessarily implies the right of both sexes to preference and choice in matrimonial connexions; in other words, the right of selection or rejection by both sexes. When the right of selection is wholly given to the male, without the power

of unreserved rejection by the female, taste for personal beauty loses all sentiment, and degenerates into gross sensuality. No courtship is necessary. The fears and hopes of the lover, if the word is not profaned by such use, only relate to the amount of money required for the purchase of beauty. The inclinations of the woman have nothing to do with the match; and, therefore, those delicate sensibilities for which the sex is remarkable, are not exercised. The effect is, that not only one half of the advantage intended by the Creator by the institution of marriage is destroyed, but the remainder is much impaired, if not also lost, by avoiding the necessity of those nice discriminations of character which are begotten by a free sexual intercourse, and the delicate, assiduous, invigorating, and expanding attentions incident to courtship.

Love, in the human race, when both sexes have equal liberty, is something more than the mere sexual passion, manifested by brutes. The increase of the species is not the only motive of the passion. If mankind had been created with all of their attributes and faculties in full perfection, as animals were, the mere propagation of the species would be the whole design of matrimony. Such was not the fact; for it is apparent, from what we know of the nature of man, and from what we know of the original condition of his attributes compared with his present condition, that man was designed for progressive improvement in his moral and intellectual attributes and faculties. In a former chapter we attempted to prove such to be the fact; and we have also endeavored to prove that the progress of improvement

depends upon the law of generation, and the accumulation of experience. If these are founded upon the laws of our nature, it follows that there must also be a law by which the sexes are controlled in their taste for personal beauty, to correspond with the design of the Creator in relation to progressive improvement. Were there no such law the design of progressive improvement might be defeated. The advantages gained by generation might be lost; because these advantages can only be secured by a taste for beauty, in the sexes, corresponding with them. The advantages, also, of experience would be, in a great measure, lost; because if the mind should not improve in capacity, equally with the accumulations of experience, the materials would be more abundant than the capacity could employ, and would be worthless beyond such capacity. That a taste for sexual beauty is founded upon the law of progressive improvement, is proved by the fact of the universal prevalence of a variety of taste, as well as a consciousness in every person's own bosom. We venture to assert that all men and women, at least of any cultivation, can tell, without any hesitation, or consideration, the style of beauty they prefer; and, if each our readers would be at the trouble of writing out a description of the items of the style of beauty he or she prefers, in full detail, and compare it with as accurate a description of his or her own constitutional temperament, form, and moral and mental powers, it will be discovered that, in almost every instance, the two descriptions will disagree in some important particulars. It will be perceived that a taste for personal beauty con-

sists in desiring qualities in which we are, ourselves, deficient; on the general principle that what we have we do not want, but what we have not, that we desire. It is this cross of organization upon which the law of progressive improvement is founded. Mr. Walker, in his "Anthropological Works," mentions this fact, and we believe, gives several examples to prove it. Examples, however, are not necessary to be furnished; for every person, by looking among acquaintances, to matches which there is good reason to believe were love matches, will immediately perceive a striking difference between the parties in some important particulars, in their physical, moral, or mental organizations. One is tall and the other short; one is fair and the other brown; one fat, and the other lean; one timid, and the other courageous; one child-like, innocent, and relying, and the other stern, uncompromising, and unyielding; in short, whenever we have good reason to suppose them to be love matches, it will be discovered by an accurate observer, that they are founded upon contrarieties and disagreements of organizations; upon the wants and deficiencies of the individuals, and not upon harmony of tempers and organizations. This does not arise from the operations of the mind; for it is equally efficient upon all classes of society, and it is a hundred to one that the parties can give no good reason for their likes or dislikes. It arises from a law of nature, that no human being craves the thing possessed, but that which is lacked. Sir Walter Scott, remarking on this subject, says,—

"As unions are often formed betwixt couples differing in complexion and stature, they take place still more frequently betwixt persons totally differing in feelings, in tastes, in pursuits, and understandings; and it would not be saying, perhaps too much, to aver that two-thirds of the marriages around us have been contracted betwixt persons, who, judging *a priori*, we should have thought had scarce any charms for each other.

"A moral and primary cause might be easily assigned for these anomalies in the wise dispensations of Providence, that the general balance of wit, wisdom, and amiable qualities of all kinds, should be kept up through society at large. For, what a world were it if the wise were to intermarry only with the wise, the learned with the learned, the amiable with the amiable, nay, even the handsome with the handsome? And is it not evident that the degraded castes of the foolish, the ignorant, the brutal, and the deformed must, when condemned to exclusive intercourse with each other, become gradually as much brutalized as so many Ourang Utangs? When, therefore, we see 'the gentle joined with the rude,' we may lament the fate of the suffering individual; but we must not the less admire the mysterious disposition of that wise Providence which thus balances the moral good and evil of life,—which secures for a family, unhappy in the disposition of one parent, a share of better and sweeter blood, transmitted from the other, and preserves to the offspring the affectionate care and protection of at least one of those from whom it is naturally due."

He further remarks—"It is scarce necessary to add, that these observations apply exclusively to what are called love matches; for when either party fixes their attachment upon the substantial comforts of a rental or a jointure, they cannot be disappointed in the acquisition, although they may be cruelly so in their over-estimation of the happiness it was to afford, or in having too slightly anticipated the disadvantages with which it was to be attended."

It is scarcely necessary, after all we have said on the subject, to remind our readers that although crosses in the same species appear to be the law of nature, in regard to sexual love, they never extend beyond the species to which the parties belong, when in a healthy condition. The range of choice is universally restricted to the circle of its own species. Circumstances may cause unions to take place out of this range, founded upon temporary passion, or the hope of advantage; but vagrant love matches, sanctioned by the pure emotions of the heart, are never made. Variety, sufficient for all the purposes designed by the Creator to accomplish

the destiny of man, has been wisely ordained to exist in each species, and a corresponding taste for sexual beauty. Indeed, the variety in each species, at least in the Shemitic, is quite as extensive as the variety of physiognomy and form of person which distinguishes one individual from every other; because a difference of form and features always indicates corresponding differences of constitutional organization. But, exclusive of these nice shades of difference, there are others which are broader and more distinctive, and which are, therefore, more frequently indicators of sexual love. We allude to the constitutional temperaments of individuals of the same species.

The ancients acknowledged but four temperaments,—viz., the sanguine, the bilious, the melancholic, and the lymphatic; to which moderns have added the nervous. To understand our subject it is necessary to have some knowledge of these constitutional temperaments.

The sanguine temperament is that peculiarity of constitution in which the activity of the heart and blood-vessels predominate. It is indicated by a sharp, frequent, regular pulse; ruddy complexion and animated countenance; person in good flesh, but not necessarily fat; fair hair and light eyes. People of this temperament receive impressions rapidly and as rapidly form resolutions, and almost as rapidly rescind them. With a quick perception, a lively imagination, and a prompt memory, they have hands and hearts for immediate impulses, but not for constant and persevering efforts.

The bilious temperament is that in which the

secretions of the liver predominate, giving to the sanguiferous system its highest energy. It is indicated by a strong, hard, and frequent pulse; brunette complexion; black hair and dark eyes; flesh moderate, firm, and the muscles marked; and the sensibility vivid and easily excited. Persons of this temperament dwell long upon, and examine closely the subjects presented to them; their passions are violent and impetuous, and their resolutions constant and inflexible. Bold in conception, vigorous, constant, and indefatigable in execution, and courageous in the presence of danger, it is from this class, particularly, from which the commanding spirits of great events are selected.

The melancholic temperament is the bilious, attended with such a derangement of the sanguiferous system that the vital functions are feebly and irregularly performed. It is indicated by a dark yellow skin; hard and contracted pulse; an uneasy, gloomy, and suspicious countenance. Persons of this description are endowed with exquisite sensibility, and an ardent enthusiasm of the beautiful; and are jealous and reserved. This class furnishes some of our best poets.

The lymphatic temperament is to the sanguine, what the melancholic is to the bilious temperament. It is a constitutional tendency to secrete a superabundance of a transparent fluid, called lymph. The indications are a weak, slow, soft pulse; flesh soft; fair hair, skin, and light eyes; form rounded; vital functions languid; treacherous memory; and an inability to fix a long continued attention upon a subject. Persons of this temperament are

averse to labor of mind or body. They are good, passive, inefficient creatures.

The nervous temperament is a preponderance of nervous sensibility in the constitution, seldom original, or prevailing naturally, unless inherited, but induced by inactivity, sensuality, or any cause which immoderately exercises the nervous, at the expense of the muscular, system. It is indicated by the emaciation, smallness, and softness of the muscles, the vivacity of the nerves, and the suddenness, and mutability of the judgment and resolutions.

Temperaments must necessarily exert a very decided influence over taste for personal beauty, because they modify it, to make it conform to the natural law of sexual love. But whether all of the species of men have natural temperaments alike, is a question which physiologists have not considered. In our opinion they have not; for if they all have them of the same kind, they cannot have them in the same degree. We have seen that the nervous papillæ have a modified sensibility, in the dark races, by reason of the *rete mucosum;* and we have also seen that there is a very decided sympathy between the sensibility of these papillæ—that is, between the healthy functions of the skin, and the functions of the liver, and the coats of the intestines, and probably the whole of the internal functions. Such is the intimate relation between the skin and internal functions that almost every disease is attended by a derangement of the cutaneous functions. Hepatitis, and the whole list of bilious and nervous disorders may be, and frequently are, produced by derange-

ment of the functions of the skin. In short, there is scarcely any disease of the human system which is not, either idiopathically or sympathetically, attended by deranged cutaneous functions. These facts are decidedly against the belief that the different species have the same degree of the different temperaments, if they have the same kind. But granting that they have them of the same kind, it is evident that the dark races not only differ from the Shemitic species in their temperaments, but must also differ from each other, in proportion to the modifying influences of the *rete mucosum:* and it is still more evident that the temperaments cannot influence sexual love, to the same degree, in all, or any of the species; because they are not apparent to the eye in all of them. It would require a very nice eye to discover whether an individual of any of the dark races, particularly the Canaanitic, had a sanguine, a bilious, a lymphatic, or a nervous temperament, or any combination of them. Consequently, even if all of them should admit perfect freedom of selection and rejection by the sexes, it could not operate to produce equal improvement in all of them. If crosses of constitutional organizations, in each species, are beneficial to offspring, then in such species in which they happen only by accident, benefits must be uncertain and contingent. May this not be one cause why polygamy is permitted to prevail so universally among the dark races? May it not also be a reason to account for the inferiority of the dark races, not only as compared with each other, but compared with the Shemitic species?

In addition to the temperaments above described,

together with the various combinations of which they are susceptible, there are other very important modifications of the human system, manifested by external appearance, which have a decided influence upon taste for personal beauty, or sexual love, and which require to be noticed.

The first modification is the athletic. This is distinguished by great strength and compactness of frame; a small, round, and bullet head; a short, thick, and muscular neck; broad, square shoulders; deep chest; and the whole muscular system strongly developed, and deeply marked. The hands, the feet, and all the joints, not covered by muscles, appear particularly small; but the tendons are marked through the skin which covers them. Persons of this description are directly opposite to those of a nervous temperament; for they have very little nervous sensibility, and consequently little imagination. Habitually tranquil, and slow to anger, they are dull and difficult to rouse; but when their patience is exhausted they surmount all resistance, being insensible to, or regardless of, blows or resistance. Philosophers regard this organization as a modification of the sanguine temperament.

The second modification is the fat, or fleshy form. This is distinguished by a short, broad, chubby face, which is always accompanied by good digestive organs, and a proportional disposition, or tendency to flesh. A short, broad, chubby face always indicates a body long in proportion to the limbs. Their bodies are frequently as long as tall persons, but their limbs being shorter, they are of low stature. A variety of the fat or fleshy form is not unfrequent in

tall persons. These have always great breadth of face accompanied with length. It is a general, but not a universal rule. that the length of the face indicates stature, as its breadth indicates flesh. The law is more exactly stated, and more universal in its application, by saying that the length of the face indicates long limbs, in proportion to the body, and breadth of face the contrary. Persons of this description have usually a rounded, plump, fair, and ruddy face; mild and amiable eyes; short neck; shoulders softly rounded; expanded, elevated chest; expanded haunches; the limbs round and tapering, terminating in hands and feet small, delicately and beautifully formed. The tall variety of this form have generally larger bones proportionably than the short; and as they grow old the flesh of the cheeks falls, and hangs, as it were, on the lower jaw, leaving a hollow in the cheek, instead of the full plumpness exhibited by the short variety. The tall variety have not, in any part of the system, the full, rounded, plumpness of the short.

In women, particularly, what is called the standard of beauty is a mean between these varieties of tall and short, fat or fleshy forms. The oval face has a medium length and breadth indicating moderate flesh, or plumpness, and moderate stature. The fine features, viz., cheek bones, nose, mouth, chin, and ears, indicate small bones, rounded joints, and beautifully tapered limbs; and the moderately developed forehead, indicated by the medium length and breadth of the face, gives promise of a good, well balanced mind. It is not, therefore, a matter of surprise that this style of beauty should so generally

please; but it is to be regretted that the possessors of it so soon become conscious of their power, and neglect the cultivation of those graces and accomplishments, the cultivation of which enables inferior persons to win from them the fruit of their natural superiority.

The third modification is the lean form which is distinguished by a narrow face, and long neck. In this form the body is always short, in proportion to the limbs; the chest is flat and narrow, indicating feebleness of the vital functions. If the face is narrow and short, the person will be lean and short of stature; if narrow and long, the person will be lean and tall. If persons of this modification are deficient in that attractive personal beauty possessed by their fleshy rivals they have generally stronger, and more active mental powers to compensate them for the deficiency. It sometimes occurs that the superior form of the face is broad, and tapers rapidly towards the mouth and chin, producing a long face, superiorly broad, and inferiorly narrow. This is a combination between the lean and fat varieties, different from the oval standard of beauty, but generally superior to it in mental endowments. The superior breadth of face forms a foundation for a corresponding breadth of forehead; and the length indicates the elevation of the forehead: consequently such persons are usually highly intellectual; while the fineness of the lower part of the face indicates small bones, and the breadth of the upper part moderate flesh. In woman such a form indicates an intellectual beauty; and in man, if of a bilious temperament especially, a commanding spirit. In speaking

of breadth of face, projecting cheek bones are never included; for there are many narrow faces with such bones, as may be seen particularly among Ishmaelites and Canaanites. In the Shemitic species, prominent cheek bones are a deformity, and fall in so rapidly that they give no enlarged base for the skull. They indicate, particularly when accompanied with a long nose, broad at the tip, and a broad chin, that the bones of the whole system are long and large.

Connected with all of the temperaments, and their modifications, there is a moral and intellectual constitution of the human species indicated by the united expression of the features of the face, and by the form of the head, particularly the forehead; which, if not the greatest charms of personal beauty, at least constitute its most important items. Inasmuch, therefore, as these last are of the highest importance, it is proportionably more important, in the natural taste for personal beauty, or the law of sexual love, that they should be made more manifest to observation. So we accordingly find them. We think it is Lady Mary Wortley Montagu who says, that if men and women were to go naked, the beauty of the face would be more lightly esteemed than beauty of the person. The experiment of partial nudity has been frequently, and we believe continues to be, made in France; which, notwithstanding the authority of Parisian modes, has never been sufficiently copied in other parts of Europe, or America, to test the general accuracy of the remark. We may, however, without a full experiment, safely pronounce any indelicate exposure of the person,—

an exposure which appeals to the passions, instead of the sentiments of the sexes,—to be contrary to the refinement of morals and intellects usually attending a high degree of civilization. It is a retrograde movement, which none but sensualists would sanction. The opinion of Lady Montagu has no foundation in truth; for there is no part of the human body, nor the whole of it together, exclusive of the head, which in the slightest degree, indicates the qualities of the heart, and the powers of the mind. The forehead indicates the degree of intellect; the eye declares the power, passion, majesty, or meanness of the spirit; the beautiful coloring of the cheeks proclaims not only the state of health, but frequently the most delicate changes of thought; the nose by the slightest change announces contempt or defiance; and the mouth is more eloquent in all passions and feelings than the words it utters; while the combination of all the features, in the habitual expression of the feelings, passions, and thoughts of the individual gives that peculiar cast of countenance which the Creator intended to be the outward sign of individual character, as well in the ordinary intercourse of mankind, as in the more important affair of sexual love.

There is a wide difference between the moral and mental attributes of men; for they are frequently possessed in different proportions by the same individual. Nothing is more common than to see them separately possessed by individuals; some possessing remarkably acute intellects, with scarcely any development of the moral powers; and again some possessing highly developed moral attributes, with

very inferior intellects. These qualities, too, are usually expressed by the countenance with surprising exactness and distinctness; and in proportion to their presence or absence, bestow upon it the most powerful attractions or repulsions. We do not design to be understood to say that morals and mind have no relation to each other; for nothing is more certain than that, in general, they have such relation. But that they are often not united in the same individual, and that the countenance often indicates high mental powers, and great moral depravity, or the reverse, is all we affirm.

These are the materials, together with the form of the person, which constitute the spiritual and personal qualities of the whole human race. No individual possesses all of them in the same degree of perfection. Every individual has a peculiar, predominant moral and mental character, as well as constitutional temperament, with a corresponding form of person, manners, and habits. They admit of infinite variations, produced by intermarriages, presenting an extensive assortment within the circle of each species, for the full exercise of taste in selecting partners. If the law of love is, as we have stated, founded upon a consciousness of deficiencies, or wants, in the sexes, the means are ample, in this varied assortment, for each deficiency or want to be supplied, and each taste to be gratified. That the law of love is founded upon this principle no one can dispute, who has paid any attention to matches believed to have been produced by it. Sexually, at least, we never admire in another the qualities we possess. A man of undaunted courage,—one who

can face danger in any shape, and will seek it out for the pleasure of encountering it,—will be more likely to admire a woman whose timidity drives her to his bosom to nestle for protection, than a masculine courageous woman who always rights her own wrongs. He might laugh at her weakness; but he will caress and console her for the quality which makes him love her more for its confiding and relying helplessness. A masculine woman in body and mind, admires the soft feminine qualities of her sex, more than the powerful, masculine qualities of men; consequently, she will seek a mate having the properties she desires. If she should happen to meet with a man so feminine that he only needs the petticoat to pass for a woman, it is ten to one that the admiration is mutual, and a love match is formed at sight. A tall, thin, dark complexioned woman, contrasts herself very unfavorably with a short, fleshy, blue eyed, fair skinned rival. She admires what she lacks; for although she may possess the beauty of her kind, yet she admires the embonpoint of the fair beauty, which is not of her kind: consequently, she prefers a short, fleshy, fair, blue-eyed man; and such a man would also see more beauty in her, than in the rival whom she envied. We might multiply examples; but our readers will find examples enough among their acquaintances, if they will only draw the distinction between love and money matches. And such as desire a more full exemplification of this law than we can afford to give to it, we refer to Mr. Walker's anthropological works.

Many persons might imagine, without reflection,

that matches so opposite in complexion, stature, temperament, habit of body, and consequently in dispositions, feelings, tempers, and understandings, would be productive of unhappiness to the parties, and evil consequences to the children. Such however is not generally the case, although it may occasionally happen; and when such exceptions do occur they almost always arise from some evil habits contracted by one, or both, of the parties, not necessarily incident to their tempers, dispositions, or understandings. The all-wise Creator ordained the law of love for the happiness of mankind; and obedience to it always confers happiness, unless the parties are obnoxious to punishment for violations of other natural laws. No two persons precisely alike in tempers, dispositions, and mental qualities, have ever been positively happy in married life. Like the notes in music, married people must slide through the gamut, combining the highest with the lowest notes, the bass with the tenor and treble, to produce harmony. One note cannot for ever be sounded on one key, flat or sharp, without offending the ear. If the law were that persons of like tempers, dispositions, and intellectual powers, should always seek each other in marriage, our race would degenerate; for the same reason it would degenerate if near blood relations should continually intermarry. In truth, there is a natural repugnance between persons of like properties. Wants and deficiencies are the causes of desires, and the occasions of love matches, the permanent happiness of married life, and the gradual improvement of the species.

The fifth proposition for consideration is,—"That

within the circle of each species crosses of individuals of different temperaments are highly beneficial; but out of this circle crosses of individuals of different species are always prejudicial."

The benefit to be derived from crosses of different constitutional temperaments of individuals, in the same species, is acknowledged by the laws of all nations, ancient and modern. These laws are only declaratory of the natural law that crosses of different temperaments, in intermarriages, are beneficial; because, if "it were natural and proper that identity of constitutional temperaments should intermarry, and that such intermarriages were beneficial to progeny, human enactments, prohibiting them within any degree of propinquity, would be impolitic and improper. But it is not only human law which recognises this principle; for the law of God is equally imperative to prohibit marriages of those in close affinity. Even among tribes so rude that they are under no restraint from human or revealed laws, the natural law operates with sufficient force to prevent alliances within certain degrees of propinquity. Thus it appears that intermarriages, within certain degrees of consanguinity, are prohibited by all laws natural, human, and divine. Exclusive of the natural abhorrence entertained by all men, to close alliances, the good policy of such laws must be evident to those who have paid the least attention to the practice of some families of marrying cousins, which very generally entails some misfortune upon progeny. So, too, in countries in which castes, nobility, and state policy, confine intermarriages, for a series of generations, to a particular class, if the class

should not be sufficiently numerous to admit of perfect crosses of temperaments, the progeny must degenerate. In countries which admit, as well by their laws, as by their customs, the utmost latitude to the operations of the natural law of sexual love, a few generations, however, produce an almost entire change of constitutional temperaments in progeny."

"It is at the first view astonishing,"—says Sir W. Blackstone, in his Commentaries on the Laws of England, book 2, chap. 14—"to consider the number of lineal ancestors which every man has, within no very great number of degrees: and so many different bloods is a man said to contain in his veins, as he hath lineal ancestors. Of these he hath two in the first ascending degree—his own parents; he hath four in the second—the parents of his father, and the parents of his mother; he hath eight in the third—the parents of his two grandfathers and two grandmothers; and by the same rule of progression, he hath one hundred and twenty-eight in the seventh; a thousand and twenty-four in the tenth; and at the twentieth degree, or the distance of twenty generations, every man hath above a million of ancestors, as common arithmetic will demonstrate." *

Thus, according to the doctrine of the descent of blood, which was the doctrine before the works of Mr. Walker appeared, every human creature must, at the twentieth degree of descent, making no allowance for intermarriages in the same family, have in his veins above a million different kinds of blood, besides the many millions of different qualities the original pair of ancestors had from whom he reckons. But Mr. Walker says that the doctrine of the transmission of blood is absurd; and, indeed, he has very

* As the tables of lineal ancestors and collateral kindred, given by Blackstone in notes to the above chapter, may be interesting to future inquirers into the early population of countries, we furnish the two notes containing them. "This (the number of lineal ancestors) will appear surprising to those who are unacquainted with the increasing power of progressive numbers: but is palpably evident from the following table of geometrical progression, in which the first term is 2, and the denominator is also 2: or to speak more intelligibly, it is evident for that each of us has two ancestors in the first degree; the number of whom is doubled at every remove, because each of our

considerably shaken its foundations, as generally it is understood. He contends, and with considerable force, that parents always impart organizations, and moral and mental qualities, to progeny, by halves, in mass, without interference with each other; that is, that the human system is divided into two distinct parts, which he denominates the locomotive, and the vital systems; the animal instincts and passions, he connects with the locomotive, and the

ancestors has also two immediate ancestors of his own." The following table exhibits the number of lineal ancestors to the twentieth degree:

Lineal degrees.	Number of Ancestors.
1	2
2	4
3	8
4	16
5	32
6	64
7	128
8	256
9	512
10	1,024
11	2,048
12	4,096
13	8,129
14	16,384
15	32,767
16	65,536
17	131,072
18	262,144
19	524,288
20	1,048,576

In regard to the number of kindred which every man has, Blackstone remarks: "If we only suppose each couple of our ancestors to have left, one with another, two children; and each of those children on an average to have left two more (and without such a supposition the human species must be daily diminishing); we shall find that all of us have now subsisting near two hundred and seventy millions of kindred in the fifteenth degree, at the same distance from the several common ancestors as ourselves are; besides those that are one or two descents nearer to, or farther from the common stock, who may amount to as many more. And if this calculation should appear incompatible with the number of inhabitants on the earth, it is because, by intermarriages among the several descendants from the same ancestor, a hundred or a thousand modes of consanguinity may be consolidated in one person, or he may be related to us in a

intellectual and moral powers he connects with the vital systems. According to this doctrine, during the whole twenty generations, the offspring have only been alternating systems, according to the relative vigor of parents. Children must be born with the moral and mental faculties of the parent who happened to bestow the vital system; and as this is generally the female, according to the theory, therefore these higher attributes of human nature chiefly

hundred, or a thousand different ways." In a note, he adds—"this will swell more considerably than the former calculation; for here, though the first term is but 1, the denominator is 4; that is, there is one kinsman (a brother) in the first degree, who makes, with the *prepositus*, the two descendants from the first couple of ancestors; and in every other degree the number of kindred must be the *quadruple* of those in the degree which immediately precedes it. For, since each couple of ancestors has two descendants, who increase in a duplicate *ratio*, it will follow that the *ratio* in which all descendants increase downwards, must be double to that in which the ancestors increase upwards; but we have seen that the ancestors increase upwards in duplicate ratio: therefore, the descendants must increase downwards in a double duplicate, that is, a quadruple *ratio*."

He then furnishes the following table:—

Collateral degrees.	Number of kindred.
1	1
2	4
3	16
4	64
5	256
6	1,024
7	4,096
8	16,384
9	65,536
10	262,144
11	1,048,576
12	4,194,304
13	16,777,216
14	67,108,864
15	268,435,456
16	1,073,741,824
17	4,294,967,296
18	17,179,869,184
19	68,719,476,736
20	274,877,906,944

Allowing 33 years for a generation, this number of collateral kindred might be produced in 660 years.

depend on her. The theory is ingenious, and probably correct, as far as it goes; but the halves must be united by functions to constitute identity of organization; and these functions must be the joint gift of both parents. A consumptive father, and a healthy mother, may have a consumptive child, notwithstanding the father has given the locomotive, and the mother the vital system; which, if Mr. Walker's theory is rigidly correct, should never occur. Thus, then, granting this theory to be correct, as far as it goes, it requires something to be added to it to make it perfect. Call this something functions, blood, or whatever will designate the peculiar property, or quality, imparted jointly by both parents to form the peculiar constitutional temperament of offspring, or by any other name; yet there is certainly a combined influence produced upon children, by parents, imparting, in a greater or less degree, a compound of the moral and mental, as well as physical, character of both parents. Mulattoes generally partake of the joint character of both the parents, in a degree; though it is very generally observed that they possess the cunning and vices of the white father, and his passions, with the obtuse moral and mental qualities of the black mother. The same has been generally remarked of the half breed Indians, produced by a white father. The instances are so few in which the crosses have been made with a white mother, and they have hitherto been so seldom distinguished from those of a white father, that we cannot speak of them with the same certainty. We raised a mulatto girl, the child of a white mother, who, in every thing but color, was a perfect negro of the worst

kind, in her passions, temper, and moral and mental qualities. The mother, a good looking woman, and rather genteel in her manners, was of an abandoned character, as those generally, or always are, who marry out of their species. But single examples are of very little value, and indeed of no value unless accompanied by accurate descriptions of the father and mother, as well as of them. Much difficulty has already been produced, in the natural history of man, by inferring general principles from individual examples. The fact that the color of the mulatto is the medium, or nearly, of the negro and white parents, and that the *rete mucosum* is thinner in the mulatto than in the negro, is positive evidence that functional power is, in some respects at least, the joint gift of both parents. It is true, that the predominant physical character, and the concomitant animal instincts and passions, and the predominant vital character and the concomitant moral and mental powers, frequently, nay in general, may be discovered to belong to each parent, but there is a decided qualification of both in the offspring, in which strong traits may be discovered of both parents. Such a qualification also appears to be necessary for the progressive improvement of the race; for if organization is communicated by halves, without any such qualification, we cannot perceive how an improved organization can take place in progeny; because parents can only give what they have and nothing more; but if the two impart a united functional power, it may be considerably greater in the child, than in either parent. The necessity of crosses of temperaments, by intermarriage, so universally re-

garded by all people as highly important to progeny, necessarily implies something more than a mere partition of organization between the parents, by distinct halves. The mind is the united result of the whole being, and not of any particular part of it; and, consequently, although the nervous system is of primary importance, yet every other part of the system must exercise a modifying influence upon the nerves. We have proved this to be the case in regard to the *rete mucosum;* and indeed the whole system sympathizes with every part of it. Excessive labor of the body, or mind, reciprocally act upon and enervate each other. An undue indulgence of any of the passions will debilitate the body and mind. Mr. Walker, if our memory serves us, indicates what we have said, by the examples he has furnished, and by inferences from his remarks; but we do not remember that he has anywhere made it a part of his system, and the impression, from a careful reading of his work, is, that each parent imparts one half of the being, in mass; and he has nowhere distinctly mentioned the mode by which the united halves are connected to produce the mind. The impression is that the parent who imparts the locomotive system, gives also the *cerebel*, which includes volition and the animal passions; and that the parent who gives the vital system, imparts the *cerebrum*, which includes the moral and mental attributes and faculties. It is known that volition and the animal passions frequently control the mind; and that the mind also frequently controls them. There must be something, therefore, that is jointly be-

stowed by both parents, besides the mere physical halves.

This a most interesting, and important subject to the highest interests of mankind, and should be thoroughly and closely investigated by naturalists. If it be true, as we think it highly probable it is, that women impart the highest attributes of our nature, in a greater degree than men, how much attention should be bestowed upon the cultivation of the attributes of women? There are so many facts which support this supposition, that we are inclined to believe it to be founded in nature. Having been a close observer of families for many years, we state, as the result of our observations, that we have very seldom seen a gifted family of children where the mother has not been distinguished; and on the contrary, that we have frequently seen a family of children, inferior in every respect, except strong passions, where the father was highly intellectual, but the mother inferior.

Mr. Walker, as all others have done who preceded him, has drawn his analogies chiefly from the animal kingdom. Analogies, in regard to generation, are more appropriate, when the inference from them is only to prove the universality of the natural law that like begets like, than when it is inferred that varieties in one kingdom, prove varieties in another. Were we inclined to illustrate our views by analogies from the animal kingdom, examples are very numerous for our purpose. The bull-terrier exhibits the joint properties of the bull-dog and terrier; and the mule the joint properties of the horse and the ass, &c. The locomotive and vital systems, together

with the instincts and passions, are strongly modified, in these animals, by both the parents. It is also remarkable, that, to a considerable degree, the properties required to be produced, are under the control of the breeder. If the male parent should be the bull-dog, or the horse, in general a different progeny will be obtained, than if the male parent should be the terrier, or the jack. But we think it unnecessary to resort to the animal kingdom for analogies, when our own species furnish direct examples; especially as the thing to be proved is the transmission of mind, which animals have not, in the sense it is possessed by human beings.

The other member of the proposition is, that "out of this circle, crosses of individuals of different species are always prejudicial."

In a former chapter we asserted that no new variety of men can be propagated by crosses of the different species;—that mulattoes, and other such crosses, are really hybrids, although they may be propagated for a few generations;—that in the progress of generation, if mulattoes, or samboes, were confined exclusively to their own variety, without intermixture with others, they would separate into the species of their progenitors, or ultimately become extinct, by defective generation;—and that we are justified, philosophically, in making such inferences, because no such intermediate variety has at any time been permanently propagated, as a distinct race, either in ancient or modern times, although they have had the same opportunities for such propagations as others have had. The doctrine of Mr. Walker, that generation is propagated by halves, by

parents, to offspring, supports this theory; for suppose in the first generation the father to be white, and the mother to be black; and that the father transmits the locomotive, and the mother the vital system, to a son the first born; and to the second child, a daughter, the father communicates the vital, and the mother the locomotive system. Suppose, again, a black man to marry a white woman; and to the first child, a daughter, the father gives the locomotive, and the mother the vital system; the second child, a son, to whom the father gives the vital, and the mother the locomotive system; and that the two children of the latter intermarry with the two children of the first. The boy of the white father, having a Shemitic locomotive system, marries the girl of the black father who has a Shemitic vital system, and if they have a child to whom the father transmits the locomotive, and the mother the vital system, the child should be white, according to Mr. Walker's theory. In the other marriage, the systems being reversed, if the father should give the locomotive, and the mother the vital system, the child should be black: or it might happen, in both marriages, that all the children might be white, or black, or alternately white and black. Instances of this extraordinary kind have occurred. "A black man married a white woman in York (England); in due course of time she had a child that was entirely black, and very much like the father in color and features, without the least participation in the features, or color of the mother. A negro was married in London to a white woman, who afterwards had a daughter as fair as any one born of white pa-

rents, and like the mother in features; but her right buttock and thigh were as black as the skin of the father. Two negro slaves having been married in Virginia, the woman brought forth a white girl. The husband's father was white, his grandfather and grandmother black; and in every family related to them there had always been a white child."

"A negress had twins by an Englishman; one was perfectly black, with short wooly, curled hair; the other was light with long hair."

"Dr. Winterbottom says, that in a family of six persons, which he knew, one half was almost as light colored as mulattoes, while the other was jet black. The father was a deep black, the mother a mulatto." Lawrence's Lect., pp. 261-2.

These are extraordinary cases, which would, if they were more general, support Mr. Walker's theory without any qualification. Ordinarily, however, the color of the progeny is the medium between the parents, if of different species; which supports the theory we have above advanced, viz.,—that there is some constitutional organization, besides the physical division of halves between the parents, call it blood or functions, imparted jointly by both parents, which qualifies the organization of children, and which may be perceived, or detected by persons of experience for several generations. The writer has frequently seen in Louisiana, Mississippi, Alabama, &c., persons who, to an inexperienced observer, were white; their complexions, features, and hair, being in all respects similar to full blooded Shemites. There was nothing to be seen about them to indicate a mixture of black blood, but a certain dark

colored circle around the iris of the eye, which is always the last indication of impurity which clings to them.

Thus, according to our theory, in a few generations, the descendants of a cross of species would return to their original types. If, on the contrary, it should so happen that a few, as it were by chance, should so intermarry as to alternate systems, so as to continue the mulatto organization, we have no doubt that such a race would, in a few generations, become extinct by defective generation; for we find it to be an invariable law in the human species that identity of organization is unfavorable to procreation. But the most irrefutable argument to prove this fact, is the circumstance that no new variety of men has ever been permanently formed by crosses of species, notwithstanding, for anything that can be shown to the contrary, there have been no greater obstacles to its propagation, than of any of the existing species. We have a right, therefore, to infer that no such variety can be permanently produced by this means, until the contrary is proved.

It has been a favorite theory with some visionary philanthropists, that intermarriages of the different species would be highly favorable to the race; but we have never heard of any of them who was willing to commence the practice in their own families. There is certainly no method that could possibly be devised, which would as certainly, and as expeditiously, degrade the whole human family, as amalgamation. If there is any hope for the improvement of the condition of the dark races, the history of mankind shows it can only be founded

upon the preservation of the Shemitic species. This is the only species endowed with any power to drag the cumbrous dark races out of the slough, in which they have been wallowing for ages. Its beneficial effects would also be very limited, both as it regards the number benefited, and the duration of it, supposing amalgamation to be in any respect beneficial. The whole Shemitic race constitute but about one fourth of mankind; consequently if every man and woman of this race should marry one of another species, a large majority of the dark races would, nevertheless, continue to be propagated; and if the produce of these amalgamations should continue to intermarry with the full blooded dark races, in the hope of improving them, the Shemitic race would speedily disappear, and with it everything which ennobles mankind. Thus the only effect of amalgamation would be to destroy the Shemitic race; in other words to degrade the Shemite to the Canaanite, not to lift the Canaanite to the Shemite. The benefit, if any, would, therefore, only be limited to a comparative few in number, and to the duration of only a generation or two, when it would be irretrievably lost. The descendants of the Portuguese, in India and Africa, have been lost to the Shemitic family by amalgamation. We have never yet heard that they are distinguished above the aborigines of the respective countries, by their moral and mental qualities. It is a common observation of travellers that half breeds are noted for the vices of both species, without their virtues. Gutzlaff, in his "Voyages along the Coast of China," speaking of the Chinese policy in conniving at the emigration of men,

and carefully prohibiting the emigration of women, at page 133, remarks, "The consequence is, that the Chinese emigrants intermarry with the natives where they reside; and hence, in the offspring, are combined the natural vices of both parents, while there is little proficiency in the virtues of either." Major Long, in his Expedition to the Pacific, speaks of the half breed Indians to the same effect. Indeed it is, we may say, the universal experience of our country that the half breed Indians and Negroes, are generally more vicious than, and in very few respects superior to, those of pure blood. A letter from the Treasurer of the Board of Missions, &c., to the Secretary, in the Panoplist, vol. XIV., p. 339, says, "The intermarriages of whites and natives have been so long practised that a considerable part of the tribe are of mixed blood; yet all, who are partly Indian are spoken of as Cherokees. The mixed breed can generally speak English, but some of them can neither understand nor speak that language at all. A few have sent their children to the white settlements to obtain the rudiments of knowledge. The greater part of them are as ignorant of everything, which it is important for them to know, as the full blooded Indians are."

There are authors of eminence, however, who advocate the doctrine that the dark races are improved morally and intellectually, as well as physically, by crosses with species more elevated; and that the progeny of such crosses occupy a middle position between the two races from whom they are derived. We entertain the contrary opinion, founded upon our own observations, as well as the observations of

others; but it is not important to contend the point. In order to make such crosses beneficial to the human race, the progeny should advance, in moral and mental capability, to the standard of the highest parent. If they advance no more than to the middle point, the whites, being immensely in the minority, by the sacrifice of themselves, can only hold the half breeds to that point, until their pure blood is exhausted; when, having no more to expend, the whole must begin to descend by crosses with the pure dark races. To be beneficial, therefore, the offspring of such crosses should advance to the standard of the most elevated parent; for if they fall short of it, they cannot assist, without a further retrograde, to elevate the next generation. Mr. Lawrence (Lect., p. 260), says, "The dark races, and all who are contaminated by any visible mixture of dark blood, are comprised under the general denomination of people of color. It is not, however, merely by this superficial character that they are distinguished; all other physical and moral qualities are equally influenced by those of the parents. The intellectual and moral character of the Europeans is deteriorated by the mixture of black or red blood; while on the other hand an infusion of white blood tends in an equal degree to improve and ennoble the qualities of the dark varieties."

Thus, then, the utmost that can be hoped to be produced by crosses of species, is, that the inferior will gain what the superior must lose,—a process which will not permanently enrich the one, and must make the other "poor indeed." Such a process is a kind of spiritual agrarianism, by which all mankind is to

be brought to an equality of mental and moral capability, without the hope of ever being able to retrieve the lost powers, until the species again separate by natural generation. We say that such crosses "will not permanently enrich" the inferior species; because, although we have conceded, for the sake of argument, that they may gain temporarily, yet it must be apparent, from what we have heretofore said, that, with every remove from the first cross, they must degenerate, with every generation, to their original standard, unless similar crosses should be occasionally thrown in to renovate them. The loss to one species would be positive and permanent; and the gain to the other problematical and temporary.

We have now arrived at the consideration of the sixth and last proposition, viz., "the opinions of some philosophers: who think that the race would be improved by uniting the sexes according to the artificial rules established to improve domestic animals, is contrary to a law of our nature, and would if it could be carried into effect, inevitably cause the degeneracy of our race."

It has been a subject of lamentation with some of our best and wisest men, that marriages of the human species were not governed by the same circumstances which have produced beneficial changes with domestic animals. This opinion has long prevailed; but it has gained new force, and has been especially current, since the improvement of domestic animals has become a science, and has attracted the attention, and exercised the talents of some of our most intellectual men, of easy fortunes. It

probably never occurred to these philanthropists that the improvements of stock, by breeding, are positive defects to the animals, except in their relations to man; that if such animals were turned off from the protection of man, to seek their own livings, they would speedily put off these improvements, or perish. Nor did it probably occur to them, that there was actually no analogy between men and animals in the properties to be propagated, in the natural laws influencing sexual intercourse, and in the immense disparity of talents which would be required to constitute a breeder of human beings, and a breeder of domestic animals. But taking it for granted, that, in this respect, as well as most others animals are the analogues of men, they have been surprised that the rules found, by man, to be so beneficial to animals, have not "been transferred to the human species."

It is surprising, however, how much talent, how much patience, and how much assiduous attention, are required to make any improvements in the forms, qualities, and powers, of even domestic animals. So much of all of these is required, that, of the great number who have attempted it, prompted by all the avidity of the love of gain, very few have succeeded upon scientific principles; and we are chiefly indebted for improvements of them, to accidents of climate, soil or generation, without the aid, or with very little assistance from scientific skill. Recently, however, some of the most acute minds of the age have been directed to this point, and they have, by attention, industry, patience, long practice, and the large employment of capital, effected some improve-

ment in the disposition to fatten, in the wool, and the speed and powers of animals, upon scientific principles. But all of the improvements effected have reference to the interest of man, in gaining more flesh, more wool, or more speed and power, at the expense he before procured less of these things from the unimproved stock. When the desired animals have been procured by the skilful and scientific breeder, a certain degree of what is technically called "in and in" breeding becomes necessary to establish, or render permanent, the qualities thus obtained; for without this the stock will immediately degenerate, and the desired qualities may be lost. But this "in and in" breeding must not be carried too far; for at a certain point, which the artist must watch, a dash of some other blood must be thrown in, to prevent deterioration from consanguinity; which, however, must not be repeated, it being desirable to return to, and constitutionally confirm the improved stock in the perfected points. Great judgment and caution are necessary in selecting the stock from whence this dash is taken, or it might happen that some serious defect might be introduced, which might destroy all the advantage of the previous labor. All these things being gained and protected, unceasing vigilance, and the constant exercise of a matured, and unbiassed judgment is necessary, to keep it in its perfection. The least relaxation in selection from the improved stock, to breed from,—the least inattention to their food or management, will be immediately exhibited in the degeneracy of the stock. Such are the requisites for the improvement of domestic animals, and therefore such are the

means recommended to be taken, by philanthropic philosophers, for the improvement of the human species. As a preliminary measure it would be necessary to adopt the municipal laws of ancient Sparta, to compel all the inhabitants to live at a common table, and all the children to belong to, and be educated by the state; for any difference, in these respects, might annul all previous advantages.

If men were mere animals, subject to some superior order of beings which had a particular interest in the development of some particular human powers, which they designed to carry to the highest pitch of perfection at the expense of others, such a system might answer the purpose; but as moral and intellectual beings, constituted as they now are, having likes and dislikes, no arbitrary system, by any order of superior beings, could possibly produce a race of men distinguished for moral and intellectual perfection, in the same manner that horses, beef, pork, and dogs have been perfected. It is very seldom that animals have dislikes for mates. It occasionally occurs, however, with horses, in which case they seldom propagate: or if, by management they are brought to it, the progeny is seldom valuable. This happens, however, only occasionally; so seldom, indeed, that it does not occur more than once or twice in a hundred examples. With all other domestic animals, so far as we know, there are no preferences. It is directly the reverse with the human species. Love is the most active and powerful passion of our nature; and on its strength and activity depend all those amenities and enjoyments which attend married life. But these are not all which de-

pend upon it; for the constitution of the offspring, physical, mental, and moral, owes to it much of its character and power. We have already seen that this mysterious passion depends chiefly upon disagreements, or contraries of temperaments and organizations. But it is not every variety of temperament and organization which produces the passion. In the infinite variety of these, produced by the infinite numbers of crosses which have taken place, there are infinite shades of temperaments and constitutions, which no eye can detect but the lynx eye of love, guided by nature. Education, by cultivating taste, may much assist this natural impulse; nay, the cultivation of the mind has as powerful an influence upon the direction of this passion, as it has over any other passion, or attribute of our nature: and happy are they who have received such an education that their tastes always equal their own developments, and never fall below the natural object of their natures. Nor is this difficult to bestow; because it is by cultivating the powers of the mind and the virtues of the heart, that this education is given, and which are the surest safeguards to erect against improper passion. Examples there are which apparently contradict this truth; but if they are closely examined most of them will be found to sustain it. It very often happens, for instance, that highly cultivated intellectual men marry women of inferior intellects, but seldom women of inferior moral qualities. This arises from a natural desire in such men for the enjoyment of a companion whose easy simplicity and child-like innocence will afford them such relaxation as their natures require in their

domestic circle. Johnson could only tolerate a Boswell for a constant companion; and none but a Boswell could patiently submit to so uncouth a bear, and find pleasure in the indignity of his situation. A highly cultivated, intellectual woman, if all her qualities are feminine, will seldom marry an ill-bred man; but if her qualities should be masculine, she will prefer a weak, passive husband, for the same reason we have seen some men prefer child-like women. Nor are any of these marriages injudicious; for they bestow upon the parties at least as much happiness as their natures can receive from matrimony; and they transmit to children modified organizations, which tend to produce an equality in the general mass of society, which will carry the whole forward in a gradual, but a regularly progressive state of mental and moral capability. Sir Walter Scott, in the extract we have made from him, says—"When therefore we see 'the gentle joined to the rude' we may lament the fate of the suffering individual," &c.; but, in general, there is no cause for such lamentation, unless, by the "rude," he intended to designate those who had acquired vicious habits. Habits of debauchery are not more likely to be acquired by those who are usually denominated "rude," than by those usually designated as the naturally "gentle." Acquired habits do not now enter into our consideration. All men are more or less liable to them, and it is the special business of parties interested in them to know them. By "the rude," then, we understand men whose natural manners and tempers, are harsh, austere, prompt, decisive, and energetic. There are meek and gen-

tle women, who, instead of being objects of pity, as "suffering individuals," by being joined to such men, could neither thrive, flourish, nor bear flowers and fruit, without the support of rugged and unyielding natures; and instead of being unnaturally "rude," or "gentle," to each other, by the union, one is supported, and the other adorned; just as we see the beautiful and graceful parasite embracing the gnarled oak, and crowning it with a glory to which its own harsh stem, foliage, and fruit could not aspire.

From the statement we have made, it appears how difficult it is to produce any permanent improvement in domestic animals; how evanescent, and how contrary to the true nature and well being of the animals, such improvements are, except in their relations to man. It required all the skill, attention, and wisdom, of a Coke, a Collins, a Berry, a Knight, and several other distinguished men, to improve the disposition of cattle, sheep, and hogs, to fatten early, and pile the flesh on particular valuable parts; and yet many judicious and experienced men doubt whether their labors have not benefited the tallow-chandler more than the consumers of beef and mutton. How slight and insignificant is the art of improving domestic animals, compared with the unbounded talents which would be required in the breeder of men and women? Physical organization and instincts are much easier improved, than moral and intellectual powers; and yet in the human subject, there is so intimate a connexion between them all, that all must be attended to at the same time, or some will be cultivated at the expense

of others equally essential to perfection. Where can we find the talents, discrimination, and impartiality, we would rather trust with this delicate and highly important affair, in which mankind, is so deeply interested, than the sympathies of the sexes, founded upon the unerring law of God? It is true this power is now lodged with young and inexperienced people; but it is where the Creator has placed it, for the designed purpose of being active before the heart becomes hackneyed with the interest of the world, and while it is yet green, fresh, vigorous, and obedient to natural impulses. Would this power be better lodged with the experience of the aged and the cold acerbity of the wise? Where shall we find the proper depositories? Shall we look for them among such men as Dr. Johnson, who, in his Rasselas, has taken occasion to throw off a little of his cynical bile upon this great and beautiful natural law.

"What," says he, "can be expected but disappointment and repentance from a choice made in the immaturity of youth—in the ardor of desire, without judgment, without foresight, without inquiry after conformity of opinions, similarity of manners, rectitude of judgment or purity of sentiment? Such is the common process of marriage. A youth and maiden meeting by chance, or brought together by artifice, exchange glances, reciprocate civilities, go home, and dream of one another. Having little to divert attention, or diversify thought, they find themselves uneasy when they are apart, and therefore conclude that they shall be happy together. They marry, and discover what nothing but voluntary blindness before had concealed; they wear out life in altercations, and charge nature with cruelty."

This is an extreme example of a milky boy and girl, without looking to the great principles of the law operating on the mass of society. The Doctor, we should suppose, was better versed in lexicography than in the laws of love. We would rather

trust to the operation of the law, if all people were as soft as the pair he has mentioned, than to any wisdom he could exercise to remedy the evil. He says that "such is the common process of marriage," which is not the fact; but if it is, what has it not performed? Look abroad upon society, and see the happiness bestowed by this "common process,"—the immense number of active, vigorous, industrious, intellectual, virtuous, and pious men and women produced by it! Contrast them with the people produced by other common processes,—Turks, Chinese, &c., and say which is productive of most benefit to mankind. But we deny it to be the "common process," in all the particulars stated. It is never the process with young people properly educated; for a cultivated mind will generally guide the natural impulse to the proper object. It might not be such as a Johnson would approve; but such as the Great Lawgiver would approve in reference to carrying out His design for the progressive improvement of the species, in mass, and to promote the happiness of the human family.

Where, then, can we find men so superior to Coke, Collins, Berry, and Knight, to whom this immensely important business can be safely assigned? It would be a ludicrous,—nay, it would be a barbarous and melancholy sight,—to behold a young couple approaching a gray-headed, spectacle-bestridden, demure tribunal, erected to control and direct marriages, holding in their hands a petition for the sanction of the Commissioners, for a union of persons, whose hearts were already united by the God of nature! And then to see these sages examining the points of

their persons (which for delicacy, should be done by matron Commissioners with the female), questioning their minds, and deliberating upon the possibility or probability of advantage or disadvantage to the race, by their union, when their Creator has already told them, by a more unerring decision than human judgment could award, that their happiness, and that of their posterity, are insured by their love! The ancient Babylonians had a singular law, which has received its share of praise from modern philanthropists, that no private contract for marriage should be made. All marriageable girls were annually brought to a public place, where, under the direction of three magistrates, they were sold by public auction. The handsomest girl was first put up, and sold to the highest bidder; the ugliest was then put up, and sold to the lowest bidder, or at the least price any one would take her for; and so on alternately to the end. Thus the prices paid for the beautiful, became dowries for the ugly, and all were provided with husbands. In the kingdom of Dahomey, in Africa, all the women are the property of the king. All that are marriageable are brought before him annually, when, after selecting those that please his own royal fancy, the remainder are disposed of by him to his subjects. Every man desirous of a wife, pays into the royal treasury a certain sum, upon which the king gives him a wife, without permitting a choice. By this plan he raises a considerable revenue. These barbarous laws are types of the arrangement we are considering. We should scarcely know to which to give a preference, because all of them contravene the natural law in about an equal degree.

Philosophers who have advocated the artificial breeding of human beings, have neither considered the utter impossibility of establishing a practical system for the purpose, nor the beautiful laws of the Creator, by which He carries forward the destiny of man to the perfection of moral and mental development originally designed by His infinite wisdom and benevolence. It is strange that men who are familiar with many of the beautiful and singularly simple laws of the Creator which govern the physical world,—who can compute the velocity of light, and calculate inexpressible and incomprehensible distances by parallaxes,—who can calculate the affinities of the elements of matter for each other, and the atoms of which they are composed, with unfailing precision,—should yet imagine that the great Being who established these invariable laws for inorganic matter, left the human species, the most important creatures of this creation, to the blind destiny of chance and passion, without the control of natural laws, to carry forward the perfection of the species!

That the moral and intellectual world is as much under the control of natural law as the physical world, cannot for a moment be doubted. Man, as an individual, is an enigma, difficult to comprehend; but man in mass, viewed for a year, or a series of years, is as regular and constant in his moral and intellectual revolutions, as any of the celestial masses which revolve round a centre. The duration of the life of an individual cannot be told by the most acute; but the average duration of life of the mass of the community, may be calculated with sufficient

precision to be the subject of insurance, at low rates, exactly equivalent to the risk and a remunerating profit to the insurer. So also the crimes of an individual cannot be predicted; but the number and kind of crimes to be committed in a community, in a year, or five years, may be foretold with considerable accuracy.

Civilization has diminished, and still continues to diminish, natural crimes, or those which lawyers call *mala in se;* but mere legal offences, or *mala prohibitia*, must of course be multiplied by civilization, because prohibitions multiply in proportion to the interests to be protected. The immense increase of the subjects of crime, by the progress of civilization, present so many more temptations to transgressors, that, if their relative proportions were compared with any former period of the world, keeping in view relative population, we think it would be found that natural crimes are diminishing, and statutary crimes not increasing. At the same time we confess that the statistics of crime, in every country, for any five years, exhibit a remarkable similarity of result with the statistics for any other immediately preceding, or succeeding five years; nay more, that if a comparison of details should be made, the classes of offences will be very nearly the same. The average assaults and batteries, larcenies, robberies, arsons, murders, &c., in any community, for any five years, will very nearly correspond with the same crimes for any succeeding five years, making allowance for increase or decrease of population, and extraordinary circumstances favoring crimes. The same remarks are applicable to the prevalence of morality,

so far as it can be estimated; for, unfortunately, we have no means of collecting the statistics of human virtue, in the same detail that we have of human vice. The records of the Churches, and the published donations to charitable institutions, constitute our only guides. These exhibit surprising regularity in their results for given periods, making allowance for difference of population, and extraordinary influencing circumstances. All of these vices and virtues are so regular in their developments, that they may be made the subjects of figures with the same certainty that lives are calculated. Insurance companies might be as profitably organized to insure against crimes, as to insure on lives. But although this extraordinary uniformity produces a conviction that morals and intellect are governed by natural laws, yet the law of progressive development is equally manifest, if centuries should be contrasted instead of short periods. It must be obvious that if five years should exhibit, and continue progressively to exhibit, any appreciable difference in the morals and intellect of man, that the amount of crimes or virtues at the end of one hundred, or at most five hundred years, would be immense. A moral and intellectual improvement of one half of one per centum for five years would amount to ten per cent. for one hundred years. Estimating the population of the world at nine hundred millions, a moral and intellectual improvement at this rate would perfect every human creature on the globe in one thousand years. But more than four thousand years have elapsed since the flood; and although we know, and can detail, immense improvements in the Shemitic spe-

cies during this period, yet two thirds of mankind, if fairly estimated, scarcely maintain the average standard of the patriarchal period.

Thus it appears that morals and intellect are under the control of natural law; and it is highly probable that, in their progress, they are governed by laws as stringent as any physical laws with which we are acquainted. Nay, from the superior importance of morals and intellect, compared with matter, in the creation, it is a fair presumption that they are, if it were possible to conceive such a thing, more the subject of law than the physical world. Strange and unaccountable is it to us, that, as individuals, we have perfect liberty of free will; and that, even as nations, men have, to a certain extent, at least so far as regards moral responsibility, the most unlimited control of their actions and destinies: and yet their conduct, as a whole, is by the inevitable law of nature, made to conform to the grand scheme of Infinite Wisdom and benevolence, in the progressive development, and ultimate perfection of the race. The moral and intellectual, as well as the physical world, is confined to its orbit, and must perform its revolutions, under the government of laws equally stringent and unvarying. The difference is that the centre of the system,—the fountain of light and heat in the moral and intellectual world,—is the Creator, —as in the physical world it is the sun. If by reason of the infinitely greater orbits of the planets of this system, and the slow revolutions on their own axes, the days, nights, and seasons, are of longer duration than the most distant of the solar planets, yet they are bound on their courses by a law as compul-

sory, and will, and must perform their prescribed revolutions. Gravitation is the great law which binds the universe of matter into one systematic whole; and love is that which operates with equal power upon the moral and intellectual world.

He must have read the pages of history to little purpose who cannot trace the operations of invariable laws in the progress of nations, from their earliest and rudest state, to the present day-dawn of the reign of morals and mind. It was for the barbarous Pelasgians of Greece that Phœnicia and Egypt extended their commerce, and preserved civilization; that the shepherds conquered Egypt, and were subsequently expelled, some of whom found a home in Greece under Cecrops and Danaus. It was for Rome, that Greece improved in arts and sciences; that Philip subverted the liberties of Greece, and Alexander conquered Egypt and Asia. It was for the Germans that Rome conquered southern Europe, and the Turks overthrew the Eastern Empire. It was for a new people, the Americans, that Europe discovered and conquered the wilds of a new world, in which the laws of progressive development are destined to be unfolded by the silent force of example, as they had previously been by the violence of arms. And for whom the British have conquered India, settled Australasia, and opened the bolted and barred gates of China, will be no problem, when our population shall have reached the Pacific. The progress of civilization and development is, and always has been, westward; and westward it will go, until it shall have drawn a belt around the globe, of such beauty

and brightness as to attract the gaze and admiration of the uttermost parts of the earth.

We have said that love is in the moral and intellectual, what gravity is in the physical world; and, strange as the assertion may appear to many persons, we also assert that sexual love, in its purity, if not the highest manifestation of this principle upon the earth, is at least the foundation, the corner stone, upon which all the noblest, most useful, and most beautiful structures of human greatness are built. For the truth of this assertion we confidently appeal to history, and we ask where is the nation, ancient or modern, which has risen to moral and intellectual grandeur, by trampling under their feet the equal relations of the sexes?

We will not say that it is utterly impossible for human wisdom to devise a plan, by which the relations of the sexes might be placed upon a more favorable footing than they are at present, for we know not that, in the progress of time, the moral and intellectual phenomena may not be reduced to as accurate a science as physics. It is highly improbable; but until metaphysics shall have been so reduced, it will be highly dangerous to tamper with the sexual relations, more especially as we see that Jehovah has established laws sufficiently comprehensive to answer the end proposed. The absolute impracticability of any artificial plan to improve the human species would become immediately apparent if an attempt were made to draw up a set of regulations to effect the object. If all the wise men in the world were collected in convention, to deliberate on this important subject, the result would only show

how little human wisdom can effect, to control a natural law. The young men and women would, with one long and loud shout, vociferate, with far more earnestness and effect than the French merchants replied to the minister, "*Let us alone.*" Every artificial restraint adopted in regard to sexual intercourse, from the aristocratic regulations of Europe, to the beastly regulations of Asia and Africa, inevitably carry with them a degeneracy of the race: and the whole history of man proclaims, that human development depends chiefly upon the greatest latitude given to the freedom of choice, in connubial connexions, restrained only by the divine law, and an improved taste for personal beauty, begotten by the proper cultivation of the moral and intellectual attributes.

We have now traced the several species in their respective sexual relations, to give a clear view, not only of their present state, but also that in which they stood at the very earliest period, before civilization or education can be supposed to have produced any considerable effects. In these early times the sexual relations must have been formed upon impulses, as nearly allied to instinct, as it is possible for human motives to resemble animal impulses, or instincts. Consequently, specific differences can be perceived in them more clearly than in others. These relations, too, are founded upon the strongest passion of human nature,—the passion, of all others, left less to chance, or accident, and which is uniformly, and universally, developed in a high degree, by the course of nature, without the will or agency of the individual. It may, therefore, be fairly pre-

sumed, that the manifestations of specific character by these relations, under such circumstances must be more conclusive than any evidence we could collect from the operation of other causes. The operation of the law is universal on the race, and we have no reason to believe that it varies in its application to particular species. The difference, therefore, must arise from specific disagreements, resulting from organizations and functions, giving rise to temperaments specifically different from each other. Let us not be opposed in this conclusion by the notions of Lawrence and Prichard, that these relations pass by imperceptible degrees and gradations into those of an opposite character, and therefore prove only varieties, and not species. The extremes which approximate species, cannot properly be noticed in a work of a general nature, unless they are of a kind to effect general principles. This cannot be the effect with these extremes, any more than individual exceptions of each species may, by the force of education, be made to resemble another species. We admit that the Shemites in and about Caucasus, approach to the Ishmaelitic species; that the Ishmaelites and Japhethites approach each other in Mongolia; and that the Ishmaelites and Canaanites approach each other similarly in the Sahara Desert. But there are peculiarities even in these approaches, which rather confirm, than weaken, the conclusion to which we have arrived, and which it would not be difficult to show, if we thought it necessary. One view is conclusive on the subject. It is, that although the species next in order to each other do approach, yet, if the two extremes are compared to-

gether, no such approach is perceptible, in any particular.

The fundamental principles we have established in these two last chapters are: First,—That the temperament of each species is the foundation of the sexual relations of that species.

Secondly,—That the sexual relations are the foundation of the social condition, the government, and of the nature and degree of the mental development which takes place in each species.

Thirdly,—That the condition of a people, whatever may be the form of government, or principles of education, is regulated chiefly by their sexual relations: consequently, that government and education alone, without a corresponding improvement of the sexual relations, produce very little improvement of the human mind, and never carry it much beyond the condition of such relations, where it remains stationary.

Fourthly,—That the law of love, founded upon the taste for personal beauty in each species, is the natural barrier to present amalgamation, or confusion of species, which cannot be violated with impunity.

Fifthly,—That the law of love is inoperative, unless both the male and female have the liberty of selection or rejection.

Sixthly,—That crosses of temperaments, in species, are beneficial; but crosses of species are always prejudicial.

Seventhly and lastly,—That the only artificial rule, which can be established by human wisdom, to effect an improvement in the human species by intermarriage, is to cultivate the moral and intellectual

powers of youth, by which a chaste and correct taste for sexual beauty will be established, in harmony with the natural law relating to individual happiness, and the progress of the race.

CHAPTER XIV.

CONCLUSION.

We have now arrived at the end we proposed to the reader. We have travelled over the space, and viewed the rich and varied scenery we promised in our Introduction. We have traced the origin of species in the human family to the patriarchal family; we followed the thread from the dispersion, the distribution of mankind, in specific masses, to their respective geographic stations; we have traced patriarchal civilization, and its influences, upon the respective species; we have seen the Shemitic species discard their patriarchal civilization, together with the polygamy and absolutism incident to it; we have seen that after they had undergone a certain degree of preparation, they again received the patriarchal civilization, which they remodeled, and reformed into bases suitable for the highest development of the human mind; we followed these improvements through the ancient Roman world, until the Germans received, remodeled, and renovated them, to make them suitable for modern civilization; and we have traced the great outline of modern civilization in its tendency to promote the moral and intellectual dignity of man.

We have also followed the other races of men through their respective modifications of the patri-

archal governments, and have endeavored to account for their stationary or retrograde conditions; we have contrasted them with one another, and with the Shemitic species, in respect to their physical and psychical constitutions, developments, and sexual relations. In our progress towards these objects, we have found it necessary to examine, with a freedom bordering on license, all the theories of others which opposed our progress. We have reconciled the facts in the natural history of man, with the Mosaic history of the creation; we have placed man in his natural zoological position in classification; we have freely examined the theories, arguments, and conclusions of eminent historians of man; we have defined analogy, and set bounds to its use in the history of man; we have exhibited the improbability, the impossibility, that accidental births, congenital varieties, produced any of the permanent varieties of man; we have demonstrated, by the principles of zoology, of anatomy, of physiology, and from the psychical attributes and sexual relations, that there are at least four distinct species in the human family; we have exhibited the importance of woman as a fundamental element of progress in civilization; and we have exhibited the great and powerful law of human nature, established by the Creator to preserve a distinction of the human species, and the injurious effects mankind would experience, if the law should be generally violated.

Have we furnished an outline, a profile view, of the natural history of man? It is all we designed to accomplish. To fill up the picture,—to give the

lights, the shades, and the coloring,—will be the duty of him who may write the natural history of the several species, and particularly the Shemitic and Japhethic, including their varieties.

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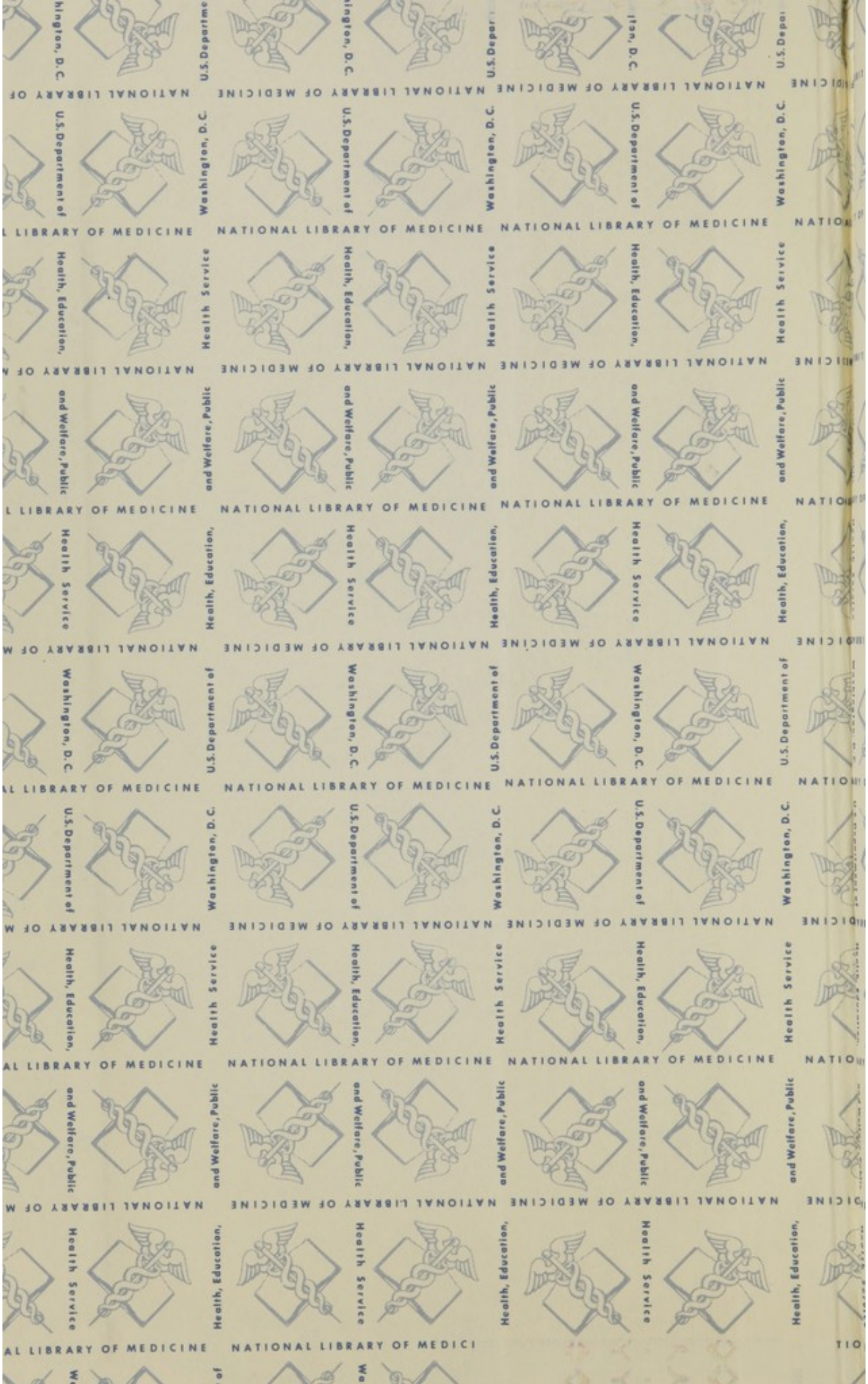
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