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THOUGHTS

ON THE

ORIGINAL UNITY

OF THE

HUMAN RACE.

CHARLES CALDWELL, M. D.

E. BLISS, 128 BROADWAY.

1830.



SOUTHERN DISTRICT OF NEW-YORK, 88.

DISTRICT CLERK'S OFFICE.

BE it Remembered, that on the first day of October, A. D. 1830, in the fifty-fifth year of the Independence of the United States of America, ELAM BLISS of the said district, has deposited in this office the title of a book, the right whereof he claims as proprietor, in the words following, to wil:

"Thoughts on the Original Unity of the Human Race, by Charles Caldwell, M. D."

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FRED. J. BETTS, { Clerk of the Southern District of New-York.

TO THE PUBLIC.

A disbelief in the hypothesis of the original unity of man, or even a doubt respecting it, has been hitherto identified, in public opinion, with a disbelief of the christian religion. Hence those writers who have opposed that hypothesis have been pronounced infidels. Whether the latter imputation be true or not, the sentiment accompanying it is certainly unfounded. If the individuals referred to were unbelievers, their infidelity was neither the cause, the effect, nor the indispensable concomitant of their opinion respecting the origin of man. Between a doubt whether all the races of men are descendants of a single pair, or even a conviction that they are not so, and unfriendliness to christianity, there is no necessary connexion. The one sentiment not only may, but actually does, exist without the other. How indeed can the case be otherwise? The sentiments belong to different departments of knowledge. Whether all men sprang from the same primitive

root, is a question pertaining exclusively to natural science, and concerns chiefly philosophers, and men of general knowledge. But far different are the nature and being of the other. The inquiry, whether religion be a reality of paramount importance, or a delusion practised by the few or the many, belongs to moral science, and concern the whole human race. As well may opinions in chemistry, mathematics, or astronomy, be pronounced unfriendly to christianity, as that which denies the unity of mankind.

No person thoroughly acquainted with human nature, and with the history and progress of civil society, can doubt, for a moment, the reality of religion. Nor can he be blind to its important bearing on the affairs of this world, were those of another even left out of the question. An enemy to religion, therefore, whatever may be his views and feelings on other subjects, is virtually a foe not only to man individually, but to the whole community. Were every one like himself, earth would be a moral chaos, the most revolting and destructive elements of which would be the human race.

A sentiment of religion enters, as an essential ingredient, into the constitution of man. It is as much a part of his moral nature, as a leg or an arm is of his organic. Deprive him of it, and he would be

rendered monstrous. Like the loss of any other indispensable portion of himself, the mutilation would unfit him to play his part in the drama of life. The sentiment of religion is adapted to the relation which man bears to his God, if it is not the immediate growth of it. It constitutes, therefore, an essential element of the law of his being. Without it, human nature would be an anomaly in creation, and an outcast from the scheme of benevolence and wisdom, which embraces every thing else.

The author of the following dissertation, then sincerely trusts that no religious scruples will interpose to prevent it from receiving a candid perusal. It will not be denied that the subject of it is curious and highly interesting; and the disclosure and establishment of truth is the only object for which it was written. But truth can never prove unfriendly to sound religion. On the contrary, it is auxiliary. The most dangerous enemies of religion are those persons who would make it an instrument to tramel the human intellect, and arrest the progress of knowledge, by preventing free and general discussion. Every new truth may be made to minister to religious feeling, by the light it throws on the beautiful and beneficent arrangement of nature, disclosing thus its aptitudes and harmonies, and by awakening

fresh gratitude to the "Giver of all good" for his bestowing the power and means to discover it.

Is any one inclined to say, that the theory which maintains that there are different species of men, some of them inferior to others, is calculated to awaken and foster, in the superior species, sentiments of pride, injustice, and unkindness toward those that are below them? The author replies, that he is not answerable for consequences, provided his representation of nature be correct. And if not correct, let error be shown, and he will instantly renounce it. If it be not wrong in the Deity to frame some species of men inferior to others, it cannot be wrong in him to declare and endeavour to prove it. The highest privilege of man is to examine the works of God, and his brightest glory to interpret them truly.

But the author denies that the theory referred to has the slightest tendency to harden, pervert, or, in any way deteriorate the feelings of enlightened man. It does not produce, in the superior, either injustice or cruelty toward the inferior, or induce him to inflict on him injury or wrong. The reverse of this is nearer being true. Inferior beings become objects of kindness, because they are inferior. That this is the case among the cultivated and the generous will not be denied. Man protects and cherishes woman, because she is feeble, and looks to him for protection.

Render her his equal and rival, and he will leave her to protect herself. It is only among the savage and the uncultivated that inferiority and feebleness invite aggression and suffer wrong. It is there alone that woman and other beings unable to cope with man are habitually degraded, and made to feel their weakness as an evil. And it is not with any reference to the principles and rules of action which prevail in such a state of society, that discussions like the present are engaged in. They are intended for those who are fitted by education for a more liberal and elevated sphere of action and thought.

It is not true, then, that the theory contended for favours injustice, oppression, and wrong, inflicted by the higher races of men on the lower. It gives no countenance, as it has been accused of doing, to cruelty or tyranny practised towards the Africans, or the aborigines of our country. Each race is entitled alike to all the rights it is fitted to enjoy. But each race is neither qualified, nor can ever become so, to enjoy and turn to proper account precisely the same rights, especially in the same degree, and has not therefore the same claim to all of them. The Caucasians are not justified in either enslaving the Africans or destroying the Indians, merely because their superiority in intellect and war enables them to do so. Such practices are an abuse of power; and where

is the privilege that is not liable to abuse? Even the inferior animals, for whose equality to man no one contends, have their rights, of which nothing but injustice and tyranny can deprive them.

·The author, indeed, knows of no evil that can possibly result from the theory which he has endeavoured, in this dissertation, to maintain. On the contrary, he firmly believes it to be not only true, but beneficial in its tendency. It is therefore that he has adduced in its favour such facts and arguments as appear to him to sustain it. Convince him that it is unfounded, or of evil influence, especially that it is unfriendly to morality or religion, and he will not only abandon it, but record his recantation. But neither assertion nor mere censure will be sufficient. for his conviction. He has rested his opinion on what he believes to be facts, and by nothing short of facts can it be shaken. To them, when presented, he will yield his assent; but to nothing else. He knows of no practice more disingenerous, or of worse tendency, in its relation to the progress of knowledge, than attempting to render odious, by denunciation, opinions which cannot be refuted by argument. Yet, to the dishonour of the times, the practice exists, even among those who pretend to justice, and make a profesion of piety.

It is time that such unfairness were frowned on by the enlightened; and that truth were placed in the proper balance, and decided on according to its purity and weight. The period calls for liberal discussion; and none else should be received into favour, or suffered to have influence. A notion is abroad that certain truths are of dangerous tendency. The fancy is idle, and should not be admitted. No truth is dangerous, except to error and mischief. They are endangered by it, precisely as what is wrong is always endangered by the presence of what is right. When the great apostle declared that "all truth is useful," he never pronounced a holier or a more important maxim. To contend for the contrary, is to impute to Heaven the perpetration of wrong.

Let not the friends of true religion, then, tremble lest liberal discussions should injure it. It will injure none but spurious religion. And the sooner that is overthrown the better. Genuine religion is brightened by discussion, as gold is purified by fire, and the diamond heightened in its lustre by friction. On every subject let fair and unrestrained inquiry prevail, exempt from opposition by power, and denunciation by bigotry, and a new era in knowledge will arise. Trick and abuse will no longer pass for reason and argument, nor prejudice and passion for pious feeling. Things will be seen and judged of as

they are, measures will be known by their proper names, and truth will always vanquish error.

The author will only add, by way of explanation, that the dissertation he now offers to the public was intended, when prepared, as an article for one of the Reviews of our country, but was found to be too long. It was written, therefore, in the review style, which he has not deemed it important to alter. He trusts it will be sufficiently intelligible, as it is; and his object, in composing it, was correct discussion, not fine writing.

Philadelphia, July 12, 1830.

THOUGHTS

ON THE

ORIGINAL UNITY

OF THE HUMAN BACE.

As far as our reading and inquiries have informed us, Dr. Pritchard is the last author of note, who has written on the subject we are about to examine. His work is entitled "Researches into the Physical History of Man," the second edition of which was published, in London, in two large volumes octavo, in 1826.

But the Doctor is not only the last writer on the unity of mankind; he is also the most learned, as well as the most ingenious. By many, perhaps we may say, by most of

his readers, he is considered as having so completely exhausted the argument and settled the question, as to render further investigation superfluous. Such, however, is not the opinion, which our own inquiries have induced us to form. As the Doctor's "Researches," therefore, lie directly in our way, occupying much of the ground over which we must pass, and as they constitute a standard production, the refutation of which will be the overthrow of the hypothesis they are intented to support, we deem it requisite to introduce into our dissertation a compendious analysis of them, accompanied by such remarks as the various topics passed in review may seem to demand.

The object of our author, in the publication referred to, may be stated in a few words. It is to establish, on philosophical ground, the doctrine of the original unity of man; in simple language, to prove the descent of the whole human race from a single pair. All minor considerations be-

ing disregarded, the accomplishment of this single purpose constitutes exclusively the design of the work.

This subject, as a matter of science, having long excited a lively interest in the minds of naturalists, and being considered by many theologians, as essentially connected with the truth of revelation, has been not only referred to by the ancients. but repeatedly discussed, by some of the ablest writers of modern times. Hence the general attention it has attracted. Independently of its own intrinsic importance, and the high relations which opinion attaches to it, Buffon has immortalized it by the splendour of his eloquence. The interest of the American public in it has been further strengthened, by an elaborate "Essay on the causes of the variety of complexion and figure of the human species," by the Rev. Dr. Smith, late President of Princeton college.

In the earnest and keen investigation which the topic has undergone, different

and conflicting opinions have been started and maintained by rival inquiriers. Whether the problem which it involves has been satisfactorily solved, or still furnishes ground for further discussion, it is not, perhaps, within either our province, or the compass of our ability, positively to determine. Holding, however, exclusively in view the establishment of truth, and disregarding all theories and opinions, except so far as we may deem them in accordance with it, it is our purpose, in the present dissertation, freely to express our sentiments, respecting the existing state of the controversy. Nor shall we conceal our belief of what we think must be its issue. But previously to this, a few remarks are due to the claims of our author to standing and regard, as an inquirer and a controvertist.

Were the value of every production of the press in direct proportion to the amount of learning and ingenuity it contains, and the degree of labour and research required in the preparation of it, there would

be few works, of the same size, comparable to that which we are about to analyze. From beginning to end it is replete with matter of peculiar interest, judiciously arranged, and communicated in a style adapted to the subject. Nor is the information it embodies so restricted in its nature, as to be acceptable only to a small class of readers. Being remarkable alike for its variety and extent, there is much in it suited to the taste of every enlightened and liberal inquirer. And the departments of knowledge in which it is so rich, are as important as they are attractive. In proof of this, an enumeration of a few of them is deemed sufficient. They are geography in all its branches, but more especially its physical and topographical, the history of man both natural and civil, general zoology, botany, anatomy, philology, and classical literature.

So ample and accurate is Dr. Pritchard's knowledge of geography, that with the situation, real and relative, the divisions both

natural and conventional, the climate, the animal and vegetable productions, the human inhabitants, and the general character of every explored and populated region, he is as familiar as with those of his own country. To say nothing further of his minute acquaintance with Europe and Asia, both ancient and modern, when he describes even the remote interior of Africa and the two America's, every district of which he speaks, might be almost considered as his place of residence. But that which, in his attainments in this branch, surprises us most, is his perfect acquaintance with Australian and Polynesian geography. Indeed, of the whole of Oceanica he treats as he would of England and With every discovered island, great and small, that is washed by the Pacific, the Southern, and the Eastern oceans. he seems as familiar as with Jamaica or the Isle of Man.

Nor, as it relates to the history of the human race, can we say much less. There again we find him so amply informed, that it is difficult to conceive how his attainments, in that branch of knowledge, can be improved. They seem to be as complete as research and accessible records can render them. Beginning with the earliest account of man in the east, he has traced him, in his multiplication and progress, through the various tribes and nations, that have appeared in Asia, Europe, and some parts of Africa, their migrations, conquests, and new settlements, with a degree of toil and apparent accuracy, which we do not exaggerate, when we call them extraordinary. It is when pursuing this investigation that he has employed, as auxiliary means, when his subject required them, the products of his philological studies, and ornamented the whole with his classical learning.

Nor are the variety and extent of his knowledge yet summed up. In the histories of the numerous races of inferior animals, and of vegetables, he is as thoroughly

versed as in that of man. On the subject, in particular, of the places of their supposed origin, and the modes of their multiplying and spreading, so as to people ultimately every portion of the earth that is capable of sustaining them, he has enriched his work with an abundance of matter both curious and instructive. On this topic he has manifested perhaps more originality, and given to it a higher degree of interest, than to any other of which he has treated. It is but justice to add, that the tone of the composition, and the general management of the discussion, from the beginning to the close of his work, are indicative of an intellect of no common order.

Such are the qualifications which Dr. Pritchard has brought to the task he has undertaken. Nor, weighty and intricate as that task is, will our readers be likely to consider them unworthy of it. On the contrary, many of them will be, no doubt, inclined to believe, that before such an array of preparation and power, all difficulties

readily vanished, and philosophy and revelation triumphed together, proclaiming with one voice the unity of man.

That we cannot concur in this opinion is matter of regret to us. Not that we think the truth of christianity in the slightest degree impugned, or the real importance of the scriptures controverted or undervalued, by a doubt or even disbelief of the descent of mankind from a single pair. The question is entirely apart from religion, and has no futher bearing on it, than any other topic in physical science. But we would not, without strong reasons, maintain a sentiment, which, even by construction, might be considered opposed to the religion of our country. Nor do we deem ourselves amenable to such a charge, in the present instance.

In the brief account of the creation of man, contained in the book of Genesis, there is nothing that ought to prevent the topic of the original unity of the human race from being freely discussed, like any

other point of natural history, and fairly determined, according to the preponderance of physical evidence. The human intellect, is improperly hampered, not to say misguided, error is rendered venerable and authoritative, and our knowledge of nature not a little abridged, by the belief, that we are forbidden, under fearful penalties, to question any sentiment or form of doctrine, that is deducible, by construction, from the old or new Testament. This, we say, is a mistaken and pernicious view to be entertained of the oracles of the christian religion. It tends to the enforcement of mere passive assent, degrades the human intellect, and is fraught with much mischief to christianity itself. To inculcate the dogma that any point of doctrine must not be scrutinized, by being brought to the test of reason, because it is supposed to be settled by scripture, is to excite in the minds of liberal and philosophical thinkers, a serious suspicion, that it will not bear scrutiny. It awakens an apprehension that it is inconsistent with reason. Thus may the scriptures be brought into doubt. Truth never shrinks from investigation. It is fearless in proportion to its purity, and, like gold in the furnace, or the diamond under polish, is brightened and rendered more precious, by every fiery trial it sustains.

We know it is a current belief, that truth, as exhibited in the old and new Testaments, is peculiarly divine and sacred in its character, and ought not to be approached but with high veneration, nor actually questioned but with the utmost caution; while that derived from any other quarter is different in its nature, and may be examined freely. This is an error as palpable, and as directly the offspring of superstition, as a belief in the divine right of kings, or in the power of the relicks of Saints to work miracles. All truth is an emanation from the same source; and no one portion of it, in whatever manner it may be disclosed to mortals, is either more sacred, or more divine than another. It is, in every case, the real image of things as they are, and nothing further. Nor is the image affected in its character, by the source from which it comes. That source can neither sully it, nor give it a factitious lustre. Whether it be the product of written or unwritten revelation, and whether it be recorded in the books of the prophets and apostles, or in the book of nature, its purity and intrinsic excellence are the same. One truth may be more important in its bearning than another, but that is the only difference between them. And in proportion to its importance should be the strictness of the scrutiny as to its soundness. Admitting, then, the tenets contained in the Scriptures to be much more momentous than any others, corresponding in degree ought to be the impartiality and severity with which they should be analyzed, and their verity determined. There should exist, in the mind of the inquirer, no secret bias in their favour, nor any settled resolution to sustain them, merely because they have a place in the pages of the old and new Testament. Facts should never be distorted in their behalf, nor inferences forced or drawn from doubtful and unsettled premises, with a view to support them, or give them a colouring other than their own. Their trial should be fair, and the decision respecting them founded on evidence. And that evidence should be derived from nature, which is itself a revelation, and, as relates to truth, is as immaculate as its author. Nor have we any other test by which truth can be tried. Should scriptural tenets be opposed, therefore, to nature, they ought to be rejected, however venerable time may have rendered them, whatever sanctity they may have been supposed to possess, on account of their source, or whatever authority they may have derived from the homage of christendom.

Such are the sentiments with which every point of doctrine ought to be exam-

ined, to whatever department of knowledge it may belong. But we are compelled to believe that these sentiments did not predominate in the mind of Dr. Pritchard, when he was engaged in his "Researches." He did not contemplate the theme of his inquiry with philosophical impartiality. He was swaved, by his wishes, to the perversion of his reason, and the prejudice of his judgment. His object does not appear to have been rigidly to examine the question, as to the original unity of man; but positively to settle it—in his own way. His resolution was fixed to dispose of the gordian knot by some means; to cut it, if he could not untie it. Hence, although he acquits himself, throughout his whole discussion, like a dexterous controvertist, he is evidently wedded to opinion-spellbound and in chains. His intellect is not permitted to have a free scope. He never forgets his covenant with himself, that, right or wrong, the affirmative side of the question must triumph. He relies therefore, on analogical evidence, as if it were positive, and instead of pursuing the direct path of the inductive philosopher, enters too frequently the labyrinth of the sophist. He plays, with no little dexterity, the part of a firm and faithful advocate, not of a stern and upright judge. And, if we mistake not, this misapplication of his powers, to reconcile incongruous things, arises from the cause to which we have already adverted, an implicit and prejudiced belief of every sentiment extorted by construction from the old and new Testament.

We mean no disrespect toward the Scriptures in saying, that however invaluable they are, as a system of moral and religious instruction, they are no authority in physical science. Nor should they ever be referred to, as such, in discussions connected with that branch of knowledge. The original unity, or the multiplicity of the human race, therefore, is as fair a question in natural history, as it would have been had Moses never alluded it. It belongs as ex-

clusively to that branch, and is as legitimate a topic of inquiry, as any point that relates to the genus Equus, or the genus Taurus. Nor does an examination of the one imply a doubt of the verity of written revelation, or a denial of its value in matters of religion, any more than that of the other. Professing our veneration, then, for all that is moral and theological in the Scriptures, we shall proceed to the consideration of the subject before us, without any regard to their authority, in the department of science to which it belongs.

It has been already remarked, that, for the maintenance of his hypothesis, that the whole human race are the descendants of a single pair, Dr. Pritchard relies exclusively on analogy. For this there is the strongest of reasons: he has nothing else on which he can rely. With a single fact in favour of his belief, and bearing directly on the subject of it, nature does not furnish him. Nor are his analogies, although specious and dextrously handled, either close or strong. In several instances, even the facts from which they are drawn are more than doubtful. With all his resources, he has not been able to establish their truth. We shall state succinctly some of his reasoning, and then endeavour to expose its fallacy.

Excited by his subject to a high tone of enthusiasm, and an unusal effort of intellectual daring, he has attempted to show, how the earth was peopled after the flood, not only by human beings, but by every kind of living matter, whether vegetable or animal. In this bold and boundless project, his attention is directed first to the vegetable kingdom. His object is to ascertain the manner in which it has been so generally diffused, as to cover every portion of the globe. In this inquiry he discovers, or fancies he does, that of each species of vegetables which the earth contains, a single male and female were at first created, and planted in a spot, where soil, and climate, and exposure, and all other circumstances were most favourable to their growth and propagation. But he does not admit that all kinds of vegetables ever occupied the same tract of country. Those of Europe, Africa, and America, are not all descendants of an Asiatic stock. Each continent was furnished, at the beginning, with its own aboriginal plants.

These primitive vegetable pairs, the venerable progenitors of their respective races, peopled, by their offspring, to indefinite distances, the regions around them. Was their lot cast in a small, or even a large island? They stocked the whole of it. Was it in a continent? Their descendants spread from the parental home-stead, until the soil, climate, and exposure became unsuitable to them, and there they halted. If a few hardy stragglers passed this frontier, they lived and dwindled but for a time, and ultimately perished. The reader versed in botany will perceive, that, according to this hypothesis, the whole of every species of monoicous vegetables is

the progeny of a single original plant; and that of dioicous ones, of a single pair.

That there is much simplicity in this supposed scheme of peopling of the earth with plants, will not be denied. But that it contains any marks of the wisdom and ways of Heaven, we cannot perceive. It strikes us as the issue of human invention, and as possessing its full share of the infirmities of our race.

With means to convey the seeds of vegetables to the requisite distances, and to plant them in suitable places, our author feels himself abundantly provided. He employs chiefly, for that purpose, winds, rivers, and smaller land-streams, oceanic currents, and the bowels of birds and quadrupeds. For the diffusion of the seeds of domesticated vegetables, he relies on commerce, and the migrations of the human race. The worst of it is, that, for the more certain attainment of his end, he imagines currents across the ocean, whose

courses have never been traced, nor even their existence positively ascertained.

On these views of Dr. Pritchard our remarks shall be brief; nor are we able to speak of them as respectfully as we would wish. Taken in the aggregate, we think they constitute a tissue as purely hypothetical, as any connected with physical science. They are not surpassed by Whiston's dream of cosmogony, Buffon's theory of generation, or the more modern vision of concentric spheres. Still, as already mentioned, they are ingenious, the result of much inquiry, and, in several points, we believe original. As respects the diffusion and planting vegetable seeds, it is true, that our author, having adopted the views of Linnæus, and other distinguished botanists, has erected his fortress on well chosen ground, and formed his defences of high authority. But no matter whose views he has adopted; they cannot all be maintained. For the diffusion of the seeds of many kinds of vegetables, the means

alleged by him are insufficient. We doubt their sufficiency for the requisite diffusion of the seeds of any. Our opinion on this subject being different from that which is generally held, a brief statement of the ground of it, is due to the reader, as 'well as to ourselves.

The places where oak, hickory, walnut, and chestnut trees grow most abundantly, are not only not washed by streams of water, but are rarely in the neighbourhood of them. The three first kinds of growth are usually found in plains, and on hills of moderate elevation, while the last prefers the sides of mountains, or even the summits, if not very lofty. By water, then, the large and heavy seeds of these plants have not been diffused. Much less can they have been scattered and planted by the winds. That mode is prevented by their specific gravity. For our author but one other means of conveyance remains; the bowels of animals. But what known animal, whether bird or quadruped, swallows either acorns, hickory nuts, walnuts, or chestnuts, and voids them again in a condition fit for vegetation? We reply, not one; and defy contradiction. When those nuts are eaten, the shells are broken, and the kernels digested. Instead of producing future trees, therefore, they produce blood and flesh, with such other forms of matter as belong to animals, and there the process ends. Against the competency of our author's scheme for the diffusion of thousands of other seeds, arguments equally valid might be urged.

But in another point of view, his hypothesis seems, if possible, still more defective. The Deity could not, in his wisdom, have trusted a great and important work to a provision so precarious. In proceeding on the principles of it, he must have made many efforts to clothe the earth with vegetables, before he succeeded. To trust the production of each species of vegetables, which it was his pleasure to create, to a single plant, or a single pair, that plant or

pair being exposed to innumerable chances of destruction from wind, rain, injuries by animals, and other accidents, would have been to invite disappointment. Under such a scheme, he would have been obliged to create many of the primitive plants hundreds and thousands of times, before their offspring could have taken possession of the districts allotted to them. In fact, we trust it will appear presently, that they could never have taken possession of them.

Nor is this all. With the entire views of Dr. Pritchard, respecting the production of vegetables, we are dissatisfied. We deem them contracted, and infinitely below the grandeur of the subject. To our conceptions of the magnificence and sublimity of the work of creation, and of the power and wisdom that achieved it, they have no affinity. They are mechanical and dwarfish. They savour exclusively of earth and man, not of Heaven, and its all-wise and omnipotent Ruler. To represent the Deity as a

mere personal manufacturer of single plants, or pairs of them, is to speak of him unworthily, and to reduce him almost to the level of humanity. He works, not by special or individual acts, but by general principles and laws. We believe that, in the morning of creation, he so arranged and endowed the material universe, that it instantly began, and, from that moment, has continued to work as a perfect selfmoving, self-regulating, and never-erring machine, and that this condition of things will be as durable as himself. He did not thus construct the orrery of matter that he might destroy it again, or that it might destroy itself. Since that point of time he has neither improved nor altered it, (it cannot be improved,) nor has he directly interfered with any of its operations. Every thing moves and acts in obedience to the fundamental rules of the system. He neither, by his immediate agency, holds worlds in their places, propels them in their spheres, nor produces nor suppresses

the earthquake or the tempest. Nor has he been personally instrumental in the production of vegetables. All is the issue of the endowments he originally conferred on matter, and the principles and laws he originally established. These views we believe to be true, because they do most honor to God and his attributes. They ascribe to him the highest degree of augustness and majesty. They seat him truly on the throne of the universe, with all his ministers in complete obedience, perfect in their offices and functions, and performing his will, without troubling him with subordinate details. They represent him as he is, the GREAT CAUSE of causes; not the petty cause of every minor effect. They do not hold him up to view as the immediate producer of mucor, moss, and lichens, by especial handy-craft operations; but as the creator of a universe by an act of his will.

Conformably to this scheme of creation, we believe he so ordered all things requisite, that in due time, and in the most suit-

able regions and places, the earth gave birth to its vegetable productions; not in pairs, but in myriads. This it did spontaneously, in obedience to laws which still exists. We further believe, therefore, that were the whole vegetable kingdoms, stalks, seeds, and roots, entirely destroyed, it would produce them again. Nor have we formed these opinions hastily, or without reflection; and, if we are not mistaken, nature is rich in facts to confirm them. The following few, out of many that might be cited, tend to that effect.

From almost any portion of uncultivated ground, in the United States, remove the forest timber, and the undergrowth that have covered it for ages, and, in a short time, a crop of different vegetables will spring up. Nor will they be the vegetables of the neighbourhood, but such as are found only in remote places. Shall we be told that the seeds or roots of the new plants had lain long buried and dormant in the ground, and vegetate now because

hindrances are removed, and circumstances rendered favourable? We reply, that this is conjecture, and add, that it is exceedingly improbable. By no strictness of search can such seeds or roots be detected. The attempt has been made, and has uniformly failed. Not a germ of the strange growth has been discovered in the soil.

Will others allege that the seeds of the new vegetables have been carried by winds, and deposited in the place accidentally prepared for them? The seeds of the plants, to which we refer, are usually such as the winds cannot carry, because they are specially heavier than the air. Winged seeds alone are transported by the wind. Will a third class contend, that the seeds are conveyed and deposited in the spot of cleared ground, by birds or quadrupeds? This is another conjecture, no birds nor quadrupeds being found in the act. Nor do so many of them frequent the place, as did before deprived of its timber, which

afforded them a shelter from the weather, and concealment from their enemies. Some of the vegetables, moreover, are those, whose seeds no animals within our knowledge do carry and plant, in the manner alleged. It is the seeds chiefly of berrybearing plants that are thus diffused. The fruit is eaten entire, by birds or other animals, the pulp digested, and the seeds voided. To treat the subject more circumstantially.

In New-Jersey, the Carolinas, and elsewhere, the following phenomena have been repeatedly observed. Cultivate, until you impoverish it, a tract of land, whose original native growth was oak and hickory. Cease to cultivate it, and it will produce, in a few years, a crop of pine. Suffer this to grow for fifteen or twenty years, until, by the falling and decomposition of leaves, branches, and bark, and the decaying of herbs and grass, the soil shall be again enriched. Fell and remove the pine, and oak and hickory will be again produced.

Further. In the same states, cut down a pine forest, that has occupied the ground for ages, and the succeeding growth will be oak and hickory. In New-Jersey, several flourishing nurseries of young oaks, produced in this way, exist, at present, in the centre of extensive forests of pine. Nor, we repeat, can the severest scrutiny detect, in the soil, either pine seeds in the one case, or acorns or hickory-nuts in the other. Are we asked the cause of these changes of vegetable productions? The answer seems easy. In the places specified, pine is the native growth of a poor sandy soil; and oak and hickory, of the same sort, when somewhat enriched by the dissolution of vegetable matter. Impoverish the soil, therefore, where oak and hickory have grown, and you fit it for pine. Fertilize that which has produced pine, and you adapt it to the production of oak and hickory. In corroboration of these statements, we quote as follows from the "Memoirs of the Philadelphia Agricultural Society."

"Intelligent surveyors, who have been occupied in running out new lands in Pennsylvania, and other States, remark, in a variety of instances, a total change of timber, in many extensive districts of wilderness. They discover, by the fallen timber, that the present forest trees are entirely different from those of the former growth. Those prostrate are, in many instances, of the resinous tribe, where those of a totally different kind are growing, of enormous dimensions

"In my own memory, a total change of timber has occurred, in a tract of my own, containing about 800 acres, in Northampton county. Previously to our revolution, I knew it to be covered with pitch pine. It was called the pine tract. This growth of timber having been blown down by a tornado, was consumed by fires of the woods. It is now entirely reclothed with oak, hickory, and other valuable and well grown and thriving timber; and scarcely a pine tree is to be seen. I can give within my

own knowledge, several instances similar, but of less extent. One, of a fine grove of white pines, thrown up spontaneously, on old fields, where no timber of that species had originally grown; and far from any such timber. Another, of a large body of valuable chestnut, where a person, now living, has reaped wheat and other grain; and where oak and hickory had been the precedent growth; and no timber of the latter kind is now to be seen on the adjacent lands." Vol 1. pp. 28, 29, 30, 31.

These extracts are from a communication by the late venerable Judge Peters, of Philadelphia, whose accuracy and extent of knowledge, in matters of the kind, were remarkable, and whose veracity no one will question. They confirm what we have previously stated, that pine springs from a lighter and poorer soil, and gives place to oak and hickory, when the soil becomes enriched; and the converse. From the same volume of "Memoirs," pp. 305-6, we further cite the following paragraph:

"In the course of the last century, the white pine sprang up spontaneously in Duxborough, in the State of Massachusetts, without having been previously a native of the neighbourhood. Between twenty and thirty years ago, there was a man still living, who had a perfect recollection of the first pine that ever made its appearance in the township: whereas, at present, that plant constitutes an eighth part of the timber of the place."

In "Mackenzie's Voyages" in North America, we find the following interesting clause. "It is a very curious and extraordinary circumstance, that land covered with spruce pine and white birch, when laid waste by fire, should subsequently produce nothing but poplars, where none of that species of tree was previously found." To agriculturists, in new settlements, it is perfectly known, that from the spots on which they burn their brush-heaps and logheaps, when they are clearing their ground, new plants spring up, entirely different

from any others in the neighbourhood; different indeed from any others existing in the country, except in similar situations. It is further known that, in many parts of Pennsylvania, and others of the Atlantic states, if a tract of uncultivated land be cleared of its timber and undergrowth, and enclosed by a fence, it will be covered, in a year or two, with a spontaneous crop of white clover. In this way a good pasture of that plant may be formed, where not a leaf of it had previously appeared. In many parts of the Allegany-mountain region, a piece of new ground, treated in the same manner, produces spontaneously a crop of timothy. Nor can either clover, timothy, their roots or seeds, be found in those places before they are cleared. Other facts to the same purport could be cited in hosts. It might seem superfluous to add, that they are directly opposed to our author's hypothesis, respecting the production and diffusion of vegetables. The earth was not made to be barren, but to be

the fruitful home of something possessed of life. It does seem, therefore, that when a spot of ground becomes peculiarly favourable to the growth of certain vegetables, those vegetables spontaneously arise in it, precisely as other effects proceed from their causes.

But we have not yet stated all our objections to the hypothesis we are examining. Dr. Pritchard's reason for considering certain situations as the places where the primitive parents of particular species of vegetables were created and planted singly or in pairs, possesses, we think, but little weight. Instead of favouring his hypothesis, it may be turned against it. It is, in substance, as follows. It is found, says the Doctor, that, in particular districts, certain species of vegetables abound much more than in any others. Therefore, in those districts, the original progenitors of these species were formed and planted.

The fact, as here stated, is true; but the inference is forced and unnatural. Our inference is very different; and, as we conceive, much sounder. Certain species of vegetables abound in certain places, not because their progenitors were created in pairs or singly, and planted there; but because in soil, climate, situation, exposure, and other circumstances, those places were best adapted to their original production, their growth and propagation. On this principal, aquatic regions gave birth spontaneously to aquatic plants, mountain regions to mountain plants, and plains and valleys to the plants which cover them. The reader will judge for himself of the Doctor's reasoning and of ours. He will, in a particular manner; determine which of the two comports best with that unbroken aptitude, and uniform connexion between cause and effect, which we every where witness throughout the works of nature.

But were we even to concede to our author that his hypothesis is correct, it would not avail him in the present discussion. The truth of this shall be made appear, as soon as we shall have given a brief exposition of his views respecting the origin and diffusion of the animal kingdom.

In effecting this, we have but little else to do, than to transfer to animals, what we have represented him to have said of vegetables, and our task will be finished. His conceptions of the origin, propagation, and spreading of these two orders of beings, are identical. In given regions he finds certain animals more abundant than in any others, and these he considers as the primitive homes of their original progenitors. A male and female of each species were created and placed there, and their progeny constitutes the entire race. This he deems true of the whole animal kingdom.

As applied to animals, this hypothesis is even worse than in its application to vegetables. Let it be tested by the standard of common sense.

In the same region we find an abundance of eagles, hawks of various species, owls, wolves, foxes, wildcats, rabbits, hares, squirrels, partridges, pheasants, doves, blackbirds, sparrows, finches, and many others, both quadrupeds and birds. According to our author's notion, this region must have been the place of formation and original residence of the first progenitors of all these animals. Let us suppose a male and female of each kind to have been thus created, and placed in the neighbourhood of each other. What must have been the issue? To render an answer to this question can puzzle no one. Every child is master of it. The beasts and birds of prey must have soon died of hunger, without enjoying a single meal, or have killed and made food of the others, and then died for want of more. Their death, from famine, was inevitable. And even the smaller birds and quadrupeds, that are not deemed predacious, if not thus devoured by their enemies, must have first eaten up

the pairs of insects, worms, and plants, of the district, and then died of hunger themselves. In a short time the earth would have been as destitute of living beings, as it was when first called into existence. Thus would this scheme of creation have failed; and the Deity, profiting by experience, must have tried another. An hypothesis more triumphant in folly, or more arrogant in pretension, than one which thus virtually questions the wisdom of Heaven, cannot be imagined. And its absurdity is augmented not a little by the consideration, that, according to the principles of it, its author is compelled to derive from single individuals or pairs, every mosqueto, gnat, maggot, mite, and animalculum infusorium, that has existed since the flood! For he does not believe in spontaneous generation at all; but adheres to the maxim amnia ab ovo. Hence he has recourse to his first pairs of insects and worms, as well as of human beings; and represents the deity as their especial manufacturer. We shall dismiss this subject with a single remark. However rich our author may be in the knowledge of individual facts and events, he appears to have attended but little to their relations as cause and effect. Although learned, therefore, as a historian, and well informed, as a naturalist, we cannot pronounce him able, as a philosopher.

But, as relates to the origin and propagation of animals and vegetables, we give him his hypothesis; and still repeat, that it does not avail him. He is no less unskilful in using than in framing it. He thus employs it.

Having found, or rather fancied, that for the propagation of each species of vegetables and animals, there was created originally but a single parental individual or pair, he inferred, by analogy, that the same was true of the human race, that the entire species of man had also descended from a single pair. But here he begged the question, by taking for granted the very position, which it was his business and avowed object to prove-that mankind consists of but one species. We have no great objection to the theory which maintains, that each species, or distinct and incommutable race of men, is the progeny of a single pair; although even that view of the subject is beset by difficulties. But the question to be determined, and which Dr. Pritchard affects to determine, not by assumption, but proof, is, what number of such races actually exist? And no satisfactory answer can be derived from analogy; the more especially if its foundation be unsound, or even doubtful. Besides, to say the least of it, as many analogies can be adduced against our author's hypothesis, as in favour of it.

Of various tribes or genera of inferior animals, the species are numerous. Of the genus Equus there are five species. Of the ape, naturalists make no less than thirty; of the baboon, several; and of the monkey, not a few. Nor are the differences between many of those species greater, be-

tween some of them they are not near so great, as between the several races of men; especially the Caucasian, the Mongolian, the African, and the American Indian. This, of course, Dr. Pritchard denies. But denial is neither proof nor argument. Yet we shall see hereafter, that, on the present topic, he has employed no other. Is it not as probable, then, that each of these four races of mankind is descended from an original pair, as each of the numerous species of baboons, apes, monkies, and animals of the equine race? By nothing that our author has said on the subject, is this probability in the slightest degree weakened.

The better to sustain his hypothesis, he very properly rejects the evidences of the distinction of species laid down by Buffon, and adopted by Hunter and others, and supplied their places by a few of his own, which we believe to be new. He admits that hybrids do breed, a truth so well established, that it is surprising it should ever have been questioned by enlightened naturalists. The

fact is, however, that they are not so prolific as the species from which they spring. And this is true of the mulatto, the hybridous production of the Caucasian and the African. It is even asserted, as the result of observation, that when the descendants of mulattos continue to intermarry, for a few generations, the offspring ceases at length to be productive, and the breed becomes extinct. This is evidence direct and strong against the hypothesis of the unity of man. With our author's definition of the term species, we are pleased, and, in justice to him, shall adopt it. But it is our purpose, and, we think, in our power, to employ it to his prejudice, in combating his opinions. The following are his words:

"The meaning attached to the term species, in natural history, is very simple and obvious. It includes only one circumstance, namely, an original distinctness and constant transmission of any character. A race of animals or plants, marked by any peculiarities of structure, which have always been

constant and undeviating, constitutes a species; and two races are considered as specifically different, if they are distinguished from each other by some peculiarities, which one cannot be supposed to have acquired, or the other to have lost, through any known operation of physical causes; for we are hence led to conclude, that the tribes thus distinguished cannot have sprung from the same original stock." Vol. I. pp. 90-1.

Our author proceeds to a specification of the leading characteristics, or criterion, by which he considers a distinctness of races clearly indicated.

First Criterion.

"If we find, on inquiry, that the physical characters and habits are similar in any particular race; if they agree, for example, as to the duration of life; in all the circumstances connected with their breeding, as in the times and frequency of breeding, the period of utero-gestation, the number of their pro-

geny; if they are subject to the same diseases, susceptible of the same contagions; if their animal faculties, instincts, and habits, are found precisely to resemble each other; there will be very strong *presumption* that they are of the same species." pp. 93–4.

In reply to this it might be justly observed, that to settle a question like the present, something more than mere "presumption" is required. We want proof, evidence that is tangible and solid. And that we have not received. But to render this discussion as liberal as possible, we shall admit, for the moment, our author's "presumptive criterion," and allow him to avail himself of it, as if it were true. the use of it there must be no limits. it apply in one case, it must apply in all. Let it be adopted, then as the rule of decision, and we venture to say, that a very striking change, if not an entire revolution, in zoological classification will be the issue. We mean that such will be the effect, if all races of animals resembling each other,

in the points specified by our author, as strongly as the different races of men do, be, on account of that resemblance, reduced to the same species. The red and fallow deer will constitute then but one species; for they resemble each other more, in all material points, than the Hottentot and the American Indian. Instead of five, its present number, the genus Equus will then possess but three species, the zebra, the quaga, and the jiggetai being identified. The genus Taurus, containing the bison, buffalo, and urus, will be consolidated into a single species. In the number of species of baboons, apes, and monkies, a similar diminution will be produced. Nor will the classification in ornithology be less altered. Of the eagle there will be but one species. Of the falcon, not a fourth of the present number. The specific divisions of the owl, the vulture, the duck, the sparrow, the plover, the humming-bird, and many others of the feathered race, will be similarly affected. For could we dwell on the

subject, it might be clearly shown, that between the numerous species of those tribes of quadrupeds and birds, there does not exist a wider difference than between the races of men. Let our author's criterion, then, we say, be adopted, in its full extent, and it will so completely subvert the commonly received views of specific difference, as to call imperatively for a new classification in zoology.

Second Criterion.

"It is manifest that there is some principle in nature, which prevents the intermixture of species, and maintains the order and variety of the animal creation; if different species mixed their breed, and hybrid races were often propagated, the animal world would present a scene of confusion. By what method is this confusion prevented? The fact seems to be, that the tribes of wild animals are preserved distinct, not by the sterility of mules, but by the circumstance that such animals are never,

in the state of nature, brought into existence. The preservation of distinct species is sufficiently provided for, by the natural repugnance between individuals of different kinds. This is, indeed, overcome in the state of domestication, in which the natural propensities of animals cease, in a great measure to direct their actions." pp. 97-8.

In instituting this criterion, our author betrays not only loose reasoning, but a want of that accurate knowledge of facts, which characterizes most other parts of his work. Between all different species of wild animals, there does not exist a "natural repugnance" so strong, as absolutely to prohibit the intercourse of the sexes. The general rule unquestionably is, that, whether wild or tame, males prefer females of their own species; and the converse. But that is all we are authorized to affirm. And that does not amount to a "repugnance." It is choice, and nothing more. Nor are facts wanting to demonstrate, in certain animals, feelings toward those of different species, the very opposite of "repugnance." The stag often seeks the female of the fallow deer. Between different species of the antelope a similar intercourse exists. Between the males of different species of the ape and baboon tribes, fierce conflicts often take place, on account of lawless attempts on their fe-Jealousy is here the ground of battle. We are assured, on authority, which it is scepticism to question, that the males of the larger species of the ape manifest, in a natural state, an ardent predilection for the human female. In a domesticated state, we know they do, more especially for the negress. Does this prove an identity of species between jacko and homo?

But our author acknowledges that the sexual "repugnance" of which he speaks, is limited to animals, in a natural state. He admits that, when domesticated, the males and females of different species forget their antipathies, and unite. And

the admission is correct. But he has failed to examine the subject in all its bearings. He has even neglected the most important of them. Has he ever seen the different tribes or races of mankind in any other than a "domesticated" state? Has he ever visited and studied them, in a state of nature? He will not reply in the affirmative. The most savage and uncultivated of the human race he has ever looked on, were raised somewhat above a state of nature. What, then, does he know of their "repugnances" or predilections in such a state? Nothing. Nor ought he ever to have compared the propensities of domesticated man with the propensities of undomesticated animals; because their conditions are different. It is only when both are in a state of domestication that he is justified in making the comparison; and there the similarity of their propensities is striking. When he shall have carefully examined tribes of mankind, in a natural state, and not before, will he be authorized to compare their propensities and actions with those of inferior animals in the same condition. His present comparison, therefore, avails him nothing.

Third Criterion.

"There is another way of examining this subject, which the statement of the question itself naturally suggests. Thus we may remark, that certain varieties in form and colour are seen in most of the tribes of animals with which we are acquainted, as horses, cows, pigs, poultry; and that these varieties exist under circumstances which preclude the idea of difference of species. It will remain to be inquired whether the diversities in mankind are of a similar description. If there should be found to be a strict analogy between those varieties in form, colour, and the organization of parts, which exist in different races of men, and the diversities which occur in the lower departments of the animal creation, within the limits of the same species, the comparison of these

two classes of phenomena would lead us to an obvious conclusion respecting the former." pp. 99–100.

This criterion, as the reader perceives, is purely analogical. No inference, therefore, worthy of philosophy, can be deduced from it. In a particular manner, it must not be brought into competition with fact. Besides, we consider it beneath the dignity of the subject. The question does not relate to Shetland ponies, hornless or manyhorned cows, ill shaped hogs, white mice, black foxes, piebald horses, or a strange breed of chickens; to all of which, with many other things ejusdem generis, our author refers. Nor can such topics throw on it a ray of light. It relates to striking discrepancies, physical, moral, and intellectual, between the several races of men, which, from time immemorial, have remained unchanged. The subject is a grave and weighty one, and should not be sported with, but seriously and pertinently discussed. Throughout his whole work, our

author never encounters it in its strength. However dextrously he may play around it, and maintain a distant conflict, he never courageously meets and grapples with it. The truth of this we trust will appear, when we shall have endeavoured to present the question in the real light in which it should be considered; a light, we must add, in which it does not appear, from his writings, that Dr. Pritchard has ever viewed it.

To ascertain how the criterion we are now considering will sustain itself under the ordeal, we shall analyze it more closely than we did the two preceding ones. The plain interpretation of it is, that if it can be made appear that certain remarkable changes have any where occurred, in some of the species of inferior animals, the fact will prove, that like changes have taken place in the human family, and thus produced the several races of mankind from a single stock. As a ground of argument, our author adduces the following varieties in the breeds of animals, and fancifully compares

them with certain varieties in the breed of men.

Corresponding to what he calls the "black-haired variety in mankind," he finds "rabbits, cats, dogs, hogs, foxes, horses, oxen, sheep, and fowls, with black hair, wool, or plumage."

In analogy with the "albino variety of men," he finds white "cats, rabbits, dogs, oxen, asses, hogs, goats, monkies, squirrels, rats, mice, hamsters, moles, opossums, weasels, martins, elephants, camels, crows, blackbirds, peacocks, partridges," and many other birds and quadrupeds, wild and tame, great and small.

Assimilated to what he calls the "xanthous variety" of man, he finds "rabbits, dogs, oxen, and cats, with light brown or yellow hair." He pronounces the "chestnut horse, which has the mane and tail of a light yellowish brown colour, precisely analogous to the xanthous complexion in mankind." He further states, that "all the swine of Piedmont are black; those of Normandy,

white; and those of Bavaria, of a reddish brown colour. The oxen of Hungary, are of a grayish white; in Franconia, they are red. Horses and dogs are spotted in Corsica. The turkies of Normandy are black, those of Hanover almost white."—" In the Mysore, there are red, black, and white sheep—and red cats in Siberia."

Having finished his remarks on colour, Dr. Pritchard treats next of the varieties produced in the figure of certain species of inferior animals. In Hungary, Sweden, and England, he finds hogs with "solid hoofs," in the island of Cubagua, a breed of the same animal with very long toes, and a variety, in some other place, but he does not say where, with "hoofs divided into five clefts." "In Guinea, the hogs have very long ears," in China, "a' large pendant belly, and very short legs," and "at Cape de Verd, very large tusks, curved like the horns of oxen."

Neapolitan horses have inordinately long heads, and Hungarian horses, uncommonly

short ones. In England, "the heads of the race horses differ much in form from those of the draft horses." In the race of the common domestic fowl, numerous and striking varieties exist. Some of them have large heads ornamented with tufts of feathers, others different sized heads without tufts; some double and others single combs; some naked legs, and others legs covered with feathers. One variety of sheep and oxen is hornless, and another has many horns. "The horses of Arabia and Syria differ widely from those of northern Germany; and the long-legged oxen of the Cape of Good Hope, from the short legged breeds of England." From these and a few more analogous facts, our author infers, that as physical causes have given rise to such remarkable varieties in several species of quadrupeds and birds, they have produced also all the several races of men from a single stock.

Although we acquit Dr. Pritchard of any premeditated violation of candour, we are

compelled to believe, that, in making this inference, he consulted feeling more than judgment, and sacrificed to his wishes rather than his reason. He had a theory to maintain, and he forced every thing to become tributary to it. He even seems to have forgotten that, in argument, supposition is not equivalent to reality. To reach his conclusion, therefore, he assumes as a postulate, and employs as a premis, what he should have proved as a fact:—that physical causes have the same power to change man, that they have to change the inferior animals. But is this true? We answer confidently, no. On the contrary, every fact bearing on the subject, not excepting those which we have just cited from Dr. Pritchard's book, gives opposite testimony. The Doctor's major proposition, therefore, being unfounded, his conclusion cannot be less so, and consequently his whole argument fails. If climate, situation, food, and other physical causes, can change men as they do hogs, poultry, turkies, oxen, and horses, why have they not done it; and why

has not our author adduced examples of it? The human race have lived in Piedmont, Normandy, Bavaria, Hungary, Franconia, Corsica, and England, as long as quadrupeds and birds. Wherefore, then, have they not sustained similar changes, and been formed into an equal number of varieties? Why, in those countries, are men so much alike, and their domestic animals so different? The answer is plain. The human constitution is less mutable than that of the inferior animals. Whether we can account for this or not, is a matter of no moment. We must admit it as a fact, because observation assures us that it is so. The very circumstance, that, in the places designated, the inferior animals are changed, and man not, is an argument against our author's hypothesis, which he cannot refute. It exposes the insufficiency of his analogies, and the impropriety of employing them, by showing, that, as far as the formation of races is concerned, mankind are proof against the operation of physical causes, which produce

varieties in the inferior animals. If by transportation to Cubagua, hogs are rendered "monstrous," and oxen "long-legged," by being conveyed to the Cape of Good Hope, why is not the same true of Dutchmen and other Europeans, who have so long resided in the same places? The reply is obvious: because the inferior animals are easily changed by food and by climate, and men are not. The influence of a tropical sun and atmosphere imbrowns the complexions of Europeans, and affects their health, vigour, longevity, but produces in them no change indicating the slightest tendency to the formation of a new race. And if, by residence in a hot climate, the covering of sheep is changed from wool to hair, why should the covering of man's head, and other parts of his body, be altered, by the same cause, from hair to wool? This question Dr. Pritchard and his adherents will find it difficult to answer. In fine, his whole chain of reasoning, founded on the alterations produced in the inferior animals, by physical causes, is fallacious;

and every fact he has adduced, under that head, may be employed for the subversion of the hypothesis he has erected.

Fourth Criterion.

"It may be suspected that the diversities of mankind present an exception to the general conclusion resulting from the comparison of other races. We must, therefore, direct our attentish to the external characters which distinguish one tribe of men from another, and observe how they are permanent, and how far subject to change? And, in general, to the facts which show how far the races of men are subject to variation. That variety of complexion which belongs to albinos, is well known to spring up occasionally in families of a different colour. Now if we could in like manner trace the origin of all other diversities in the human form and colour, the point at issue would be fully determined.

"In following this suggestion, we shall examine the history of the various races of

mankind, and endeavour to find out how far their peculiarities are liable to change; whether nations descended from one stock have always retained their peculiar character, and the form they derived from their common ancestors, or in what degree, and under what circumstaces, they have deviated from it

"The variations of colour afford the best explanation of these views. If it could be shown that a white family has arisen from a black stock, or a black family from a white stock, it is obvious that the difference of complexions would no longer be regarded by any body as a specific distinction. But the same conclusion may be drawn, if we can point out facts which prove that the transition has taken place by several degrees; if, for example, we find one instance in which a brown, or copper-coloured progeny has sprung from a black race, and then discover another instance where this last colour is the prevalent hue, and show that it has again undergone variation, and that a white

off-spring has arisen from it; it will thus be rendered evident that there is no clearly marked and definite line which the tendency to variety or deviation cannot pass; and that we may rest satisfied that there is in this case no specific distinction." pp. 101-2.

This fourth and last criterion we think the most extraordinary and objectionable of sall. Among its defects is the obscurity of the language in which it is communicated. If we understand it correctly it implies a belief, that the different races of mankind are the product of accident. That they are but incidental deviations from an original stock, each of them commencing in a lusus natura. The issue of this frolick of nature comes into the world with marks of departure from parental likeness, so strong as to constitute a variety of the species. These marks being connate and constitutional, our author pronounces them permanent, and transmissible to posterity. The individual possessing them, therefore, becomes the progenitor of a new race, which nothing can

change, or arrest in its progress of propagation, but another gambol of nature, similar to that which produced it. Thus, as often as the wanton goddess chooses to hoiden it, and turn a summerset, she produces a new variety of man.

For the illustration of this topic, let us suppose the original stock of mankind to have been the Caucasian, from which have descended at least three distinct and well marked varieties, the Mongolian, the African, and the American Indian. From this simple beginning our author has to people the world with its present races of men. Let us see how he will proceed, and vanquish the difficulties he will have to encounter.

One of three events must first take place, neither of which is within the compass of probability; we might say possibility, and inconsistency with the laws which govern such occurrences, defy contradiction. A Caucasian father and mother must do what such a pair never has done, give birth to a

true Mongolian, African, or Indian infant. Nor will one be sufficient. They must produce a pair, male and female, otherwise the race cannot be established. For the natural and healthy issue of a Caucasian and a Mongolian, an African, or an Indian, is necessarily a mixed breed, and does not belong to any race. The commencement of each new race required a concurrence of the same contingencies—the production of a male and female infant, of the same race with each other, but different from that of their parents.

Nor are these the only difficulties our author has to encounter, in his scheme of peopling the earth, as we find it. We will suppose them vanquished, and that he is in possession of a pair of African, Mongolian, or Indian infants, the offspring of Caucasian parents. If this pair remain among the Caucasians, they cannot propagate a different race, in its original purity. It is by no means certain that they will unite for that purpose, in as much as their pre-

dilections will more probably take another direction. But although they may thus unite and have issue, it cannot be admitted, because it does not comport with experience, that their descendants will always intermarry with each other. They will cohabit with Caucasians, and the offspring will be mongrel. Our author must, therefore, separate them from their parental stock, and remove them to such a distance, that they will be beyond the reach of intercourse for ages. In no other way can he establish a completely different race. But, at an early period of the existence of man, when geography was unknown, how the descendants of an original stock could have wandered thus remotely from their primitive home, through unexplored and trackless regions, and amidst the perils of death from starvation, beasts, of prey, and other accidents, is a problem whose solution we leave to others. Nothing but compulsion could have led to such an attempt

at migration, nor could any thing but a miracle have rendered it successful.

If, with some writers, we suppose the primitive stock of mankind to have been the African, the same difficulties must have been encountered in the production of the Caucasian. But admitting the Mosaic account of the creation of man to be correct as to locality, the supposition that Adam and Eve were negroes is highly improbable, not to use a stronger term. Within the reach of history there have been no Africans in the supposed region of the garden of Eden. Nor is the climate of the country suitable to them. It can scarcely be imagined, therefore, that the Deity, having so peculiarly favoured and honoured man, by creating him "after his own image," would sully his kindness, by placing him in a residence unadapted to his nature.

But we have yet another objection to our author's hypothesis. Why did his fancied deviation from an original stock produce but three or four different races? Accident

being unlimited, why has not the number been multiplied? In a particular manner, why did the event occur only in early times? Human nature is the same now that it has been for thousands of years. Wherefore is it, then, that new races do not start up, at present, as well as formerly? No such phenomenon has occurred within the memory of man, or the reach of history. Tradition speaks of migrations, floods, earthquakes, and wars. So does poetry and fable. But, on the subject of the production of new races of men, even they are silent. Every race believes itself original, and considers others as the result of degeneracy. But none designates the time when the degeneracy began, or the causes that led to it.

According to our author's principles or analogy, new races ought to occur now, much oftener than at an earlier period. He asserts, we believe correctly, that varieties arise much more frequently in domesticated animals, than in wild ones of the same species. But civilization is to man what domestication is to horses, oxen, camels, dogs, sheep, hogs, goats, rabbits, and poultry. Mankind are much more civilized now than they were several thousand years ago. The production of new races, therefore, should be more frequent.

Our authors attempt to sustain his hypothesis by a reference to the occasional appearance of albinos, is futile. There exists no nation or tribe of Albino's. Nor if there did, do they constitute a distinct race. The difference which makes them is superficial; a matter of mere colour, and nothing more. Complexion excepted, an African albino is a real African, and a Caucasian albino a real Caucasian. Nor do albinos always propagate their like. The descendants of those from an African stock are as often black as white; while such as are of Caucasian descent produce frequently perfect Caucasians. Let a colony of albinos be planted in an uninhabited island, all intercourse with the rest of mankind being prohibited, and a new race will not be the

product. In every thing except colour, which will be mixed, the descendants will be identified with the original stock.

But we have a further objection to the ground on which Dr. Pritchard refers to the albino variety, in support of his hypothesis. Albinism is a disease; at least an infirmity. It consists in a want of what is necessary to the perfection of man—that fine mucous tissue, which lies between the cuticle and the true skin, and gives the natural and healthy complexion. Nor are albinos so vigorous and hardy, as the more perfect individuals of the races from which they spring. They are less capable of sustaining excessive heat, cold, exposure and fatigue. From a deficiency of the dark pigment on the iris, they are also, in a considerable degree, intolerant of light. As an evidence of their constitutional infirmity, they become prematurely old, and are rarely long-lived. We do not recollect an instance to the contrary. Instead of constituting, then, a new and distinct race, as Dr. Pritchard

seems inclined to allege they do, albinos are but enfeebled individuals of an original race.

Our author adduces no instance, nor has any, we believe, ever existed, in which the children of Caucasian parents have been black. He speaks of children perfectly black having been the issue of an intercourse between Caucasians and Africans. Such occurrences, however, are very rare, and have no bearing on the present question. Instead of being the uniform result of a general law of propagation, they are anomalous and unnatural. Besides, they involve only the effects of distinct races, already existing, and have no bearing on their origin. We shall not, therefore, make them a subject of discussion.

Every naturalist knows something of the "porcupine family" in England, whose skin is covered closely with a long, hard and horny kind of warts, and in which the disease, for so it must be called, has passed from parent to offspring, for two or three

generations. It is alleged that from this family a new race of men might arise. The fancy is too ludicrous, to meet a serious reply. There is nothing in the affection more characteristic of a new race, than there is in cretinism. It is much more likely that the family will soon be extinct. It is a century since its first progenitor appeared; and there are but two individuals of it now living. The members of it are but short-lived, because they are enfeebled by a hereditary complaint. But this is not our only objection to our author's singular notion on the subject. Insulate the "porcupine family," or any other family, so that the individuals of it can intermarry only with each other, and, by a law of nature, their descendants will degenerate. They will pass from imbecility perhaps to idiocy, and in time to extinction. What but family intermarriages has worn out the Bourbons, Braganzas, Brandenburghs, and other royal and imperial houses of Europe? And what else has so deteriorated the Portuguese nobility, that they are threatened with annihilation? Instances of the deterioration of man, from a similar cause, are not wanting in our country. From no such source, then, as the porcupine family, or any other accidental production of demi-monsters, can a new race of men arise.

But we must have done with all such paltry considerations. They are far beneath the importance of the occasion. The origin of the different races of men is one of the weightiest and most interesting subjects that. belongs to natural history. To attempt to solve the problem which it involves, by the issue of a few anomalous births, is solemn triffing. As well may an effort be made to derive from the shallow rills, emitted by three or four bubbling fountains, the waters of the ocean, or the Andes from the labours of a confederacy of emmets. Individuals may be changed in appearance by trivial causes. But nothing that is not vast and powerful, can give character to nations, composed of millions of the human race.

We have intimated our belief that Dr.

Pritchard has never taken a dispassionate view of the real strength of the question respecting the origin of the different races We mean the strength of the objections to the hypothesis, that they were all produced from a single stock, by the operation of any physical causes now in existence. That our reason for expressing this belief may clearly appear, we shall now endeavour to present some of those objections in their true character. The more clearly to exhibit their force and bearing, it is necessary to give a full and correct detail of the leading and most characteristic points of difference that exist between the different races of men, supposed by our author to be convertible into each other. But previously to this, a few facts in chronology claim our attention.

According to accredited dates, it is four thousand one hundred and seventy-nine years since Noah and his family came out of the ark. They are believed to have been of the Caucasian race; and the correctness

of the belief there is no ground to question. We shall assume it, therefore, as a truth, without adducing the reasons which seem to sustain it. Three thousand four hundred and forty-five years ago, a nation of Ethiopians is known to have existed. Their skins, of course, were dark, and they differed widely from Caucasians in many other particulars. They migrated from a remote country, and took up their residence in the neighbourhood of Egypt. Supposing that people to have been of the stock of Noah, the change must have been completed, and a new race formed, in seven hundred and thirty-three years, and probably in a much shorter period. And near three thousand years ago the Greeks had a knowledge of a nation of people with a black skin, thick lips, and woolly hair. Since the earliest period of history, therefore, the present races of mankind have existed. The relation of these facts to the present discussion will appear hereafter.

In the account of the differences, on which

we are about to enter, it is not our intention to embrace those of all the existing races of men. A representation so extensive, with the remarks that should accompany it, would protract this article far beyond the limits within which we mean to confine it. We shall speak particularly of the differences of only two races, the Caucasian and the African. These constituting the two extremes of mankind, the observations we shall offer, in relation to them, will apply, with equal truth, to intermediate diversities. Under the term African, we shall include the Hottentots, the Boschesemen, and the Papuas, or negroes of Oceanica.

The general diversity between the Caucasian and the African races is composed, like other aggregates, of many subordinate ones. It is corporeal and mental. The former consists of differences in colour, texture, and figure; the latter, in intellect and moral feeling. The difference of colour is almost universally represented to be seated alone in the rete-mucosum. This is a mis-

and the cuticle, the latter being considerably darker, as well as thicker, in the African, than it is in the Caucasian. The difference of texture exists chiefly in the hair and some of the bones, the former being, in the African, much more harsh and horny, and the latter denser, harder, and heavier. The difference of figure arises principally from the shape of the bones, their modes of articulation, and the form of the muscles; to which might be added, the form of the brain, that organ being known to give shape to the scull.

As respects the colours of the two races, our analysis shall be brief. The Caucasian is fair and ruddy, and the African black, or of a deep and dusky brown. The ruddiness of the former race arises from the tinge of the blood, contained in the capillary vessels of the true skin, being visible through the rete-mucosum and the cuticle, both of which are very thin, and somewhat transparent. The colour of the latter is produced chiefly by the secretion of a dark pig-

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ment, by the vessels of the true skin, and its deposition in the cells of the rete-mucosum. This pigment appears through the cuticle, which, although, as already stated, much thicker and darker than in the Caucasian, is sufficiently transparent to show what is beneath it. In the African, the rete-mucosum is comparatively thick; whence arises the softness of his skin to the touch. When the human skin is examined with a microscope, it exhibits a great number of small sulci, or depressed lines, meeting and intersecting each other at different angles, with elevations between them; the whole resembling somewhat the surface of a bed-quilt. These elevations are much fuller, and in stronger relief in the African than in the Caucasian. In the former they resemble the interstices of a bed-quilt stuffed; in the latter, without stuffing. The skin of the African generates less heat than that of the Caucastan, and its temperature is therefore lower. We ought rather to say, that it more powerfully and successfully resists the action of heat from without, tending to raise its temperature. It resists a low temperature with less power. Hence the superior fitness of the former for hot climates, and of the latter for cold ones. It is obvious, then, that the whole amount of difference between the skins of these two races is great—much greater, we apprehend, than it is generally supposed to be.

The same is true as relates to the hair. But the precise difference here cannot be adequately made known in words. To be fully understood, it must be seen. The hair of the two races must be examined with a microscope. The difference in texture and character will then appear not only manifest but striking. As already stated, the African hair, although smeared with an unctuous and softening secretion, will be found to be harsh, crisp, and horny, and rough from a multitude of projecting points. That of the Caucasian, although less unctuous, is much more pliant, soft and smooth. It is also more distinctly fibrous in its texture, than the other. In

fact, the two productions are as different from each other, in their general appearance, we might say much more so, than many plants are, which botanists refer to different species.

But the difference between the osseous and muscular systems of the two races is still more plain and striking, because the parts are larger, and can be more easily examined and compared. In the African the hones of the head are thicker, more compact and therefore stronger and heavier, than in the Caucasian, and the cavity of the cranium much smaller. The forehead being narrower and more retreating, the sincipital region is inferiorin its capacity, in proportion to that of the occipital. The orbiter cavities are wider and deeper, and the zygomatic processes of the temporal bones larger and more projecting. Although the nose is short and depressed, its cavities are more capacious, and the olfactory nerves are spread over a more extensive surface than in the Caucasian. The upper maxillary bone is much broader

and stronger, and projects more forward and outward, and the under one, being also thicker and stronger, but narrower in its body, and inclined outward to meet the other, has no projection to form a chin. Hence, in correspondence with the shape of the maxillary bones, the African has an upper lip of unusual depth from the nose to the mouth, an under one uncommoly short from the mouth downward, and instead of projecting, like that of the Caucasian, his chin retreats. In the strictness of technical language, he can scarcely be said to have a chin. Corresponding with the direction of his maxillary bones, his teeth point obliquely outward, while those of the Caucasian are nearly perpendicular. Nor is their position the only respect in which they differ from the teeth of the Caucasian. They are larger, stronger, sharper, further apart, and covered with a thicker and firmer enamel. The cuspidati are more truly canine, and the projections from the grinding surfaces of the molares bolder and more pointed. In fine,

they resemble much more the teeth of the ape, and are better fitted for cutting and tearing. In consequence of this general structure of the hard and soft parts, the African's mouth or muzzle projects considerably beyond his nose. To this may be added, as a further diversity, in an important organ, that by far the greatest portion of his brain lies behind a perpendicular line drawn from the external opening of the ear to the top of the head, while, in the Caucasian, the portions on each side of such a line are much more nearly equal.

Corresponding in their character to the maxillary bones and the teeth, the muscles appropriated to the movement of those parts, are much larger and stronger in the African than in the Caucasian. Hence the superior power and dexterity of the former in biting and chewing hard substances. We once knew an African, who, in combats with his fellow servants, was almost as dangerous in his snaps as a dog. To sever a finger or a thumb, or to take a mouthful of flesh from the arm or the shoulder,

was the act of but a moment. After what we have said, we need scarcely add, that it requires a severer blow on the head to fell an African, or fracture his scull, than it does to produce a similar effect on a Caucasian of the same size and strength.

But we have not yet done with the bones of the head. The foramen magnum, in the occipital bone, is larger in the African than in the Caucasian race. The necessary consequence of this is, that the medula oblongata, which passes through it and fills it, is also larger, as is indeed the whole of the spinal cord, in common with many of the nerves. We may here remark, that the nerves of the African generally are larger in proportion to his brain, than those of the Caucasian. In this he resembles the inferior animals, occupying a station between them and the individuals of the race with which we are contrasting him. Nor is his head equally well balanced on the spinal column. Such is the position of the condyls of the os occipitis, which rest on the atlas, that the portion of the head behind them

preponderates over that which is before. This, added to the sloping of the forehead backward, gives to the African countenance that upward direction, which it is known to possess. While the front line of Caucasian countenance is nearly perpendicular, that of the African falls far behind the perpendicular, making with it an angle of many degrees.

The difference between the upper extremities of the African and the Caucasian are peculiarly striking. In the former the clavical is rather shorter and more crooked than in the latter, while, in proportion to his height, the arm is longer. An African of five feet eight or nine inches has an arm considerably longer than a Caucasian of six feet. Nor is this all. In the African the forearm is longer in proportion to the humerus, than in the Caucasian. His hand, which is not so large, is more bony and tendinous, and less muscular, and his fingers are longer, slenderer, and less fleshy. Hence when he strikes with his knuckles, in

combat, he so frequently cuts his antagonist, while the Caucasian only bruises; or, at least, cuts less severely, by a blow of the same force. His nails project more over the ends of his fingers, are thicker and more adunque, and bear a stronger resemblance to claws. The veins of his hand are smaller, we believe fewer, and differently distributed. From the small amount of blood, which circulates through it, the hand of the African is rarely very warm.

In the African the bony fabric of the thoracic portion of the trunk is firmer than in the Caucasian, and differently shaped. The ribs are thicker and stronger, and so formed and placed, as to flatten the chest at the sides, narrow it before, and deepen it somewhat, from the sternum to the spine.

Descending to another important part of the body, we find further differences. In the African of both sexes, the bones of the pelvis are slenderer than in the Caucasian. In the male African that cavity is less capacious, and in the female more so. than in the male and female of the Caucasian race. Nor is it in the bony structure only of this portion of the body that a difference exists. The muscles also are dissimilar. In the African, the muscles that cover the sides of the pelvis are less full than in the Caucasian, while those that cover it behind are more so. Hence the narrowness of the hips of the former, from side to side, and the ungraceful projection of the nates backward. Corresponding to that of the hips, the form of the whole African thigh differs materially from that of the Caucasian. It is more flat laterally, thinner from side to side, and deeper from front to rear.

In the two races the lower extremities are, in their relative proportions, the reverse of the upper. In their entire measurement, they are shorter in the African than in the Caucasian, while the thigh, which corresponds to the humerus, is longer in proportion to the leg, which is the part that corresponds to the forearm. The superior length of the African thigh in proportion to

the leg, is a point which has received from naturalists but little attention. Vet it is of peculiar interest in the present inquiry. The difference in the articulation of the bones of the thigh and leg in the two races, which is somewhat striking, can be learnt only by inspection. It may be observed, however, that it is such as to produce in the African a perceptible flexure of the limb, at the knee, in a forward direction. His lower extremity, therefore, is not so straight as that of the Caucasian. The difference in the bones of the leg is great, and we might add, peculiarly characteristic. In the Caucasian, the tibia or large bone is straight, and the fibula or small one somewhat crooked. In the African the reverse is true. By a bend a little above its middle, the tibia is gibbous in front, whilst the fibula is straighter than in the Caucasian. In the two races the muscles of the leg are also very different. This is more especially the case with the gastroenemii. In the African the belly of these muscles is small,

and situated near the hock, while their slenderer portions and the tendo achillis, which is attached to them, are long. This gives to the limb a very unsightly form. In the Caucasian the belly of the gastroenemii is full and round, and situated lower, so as to bestow on the leg its fine proportions and elegant shape. Here the tendo achillis is short.

In the size and form of the bones of the foot, and their articulation with those of the leg, the African differs widely from the Caucasian. His os calcis, in particular, is much longer, less rounded and malleolated at its posterior extremity, clumsily attached to the astragulus, and points almost directly The metatarsal and tarsal backwards. bones are also larger, and so united as to form surfaces nearly plain on both their upper and under sides. His toes, like his fingers, are longer, slenderer, and less fleshy than those of the Caucasian, and his toenails thicker and stronger, and more projecting and adunque. From a want of fleshiness in its muscles, his entire foot is bony and tendinous, and its blood vessels are small. Such are the leading differences in detail. In the aggregate, they render the foot of the African longer, broader, flatter, harder, and much more projecting and pointed behind its junction with the leg than that of the Caucasian. His foot and leg resembles somewhat a matrock and its handle; broad before, and long, narrow and sharp behind. His toes also turn so much outward, that when he walks, the inside of his foot is almost in front. Owing to its scantier supply of blood, his foot is more easily chilled and injured by frost, than the foot of the Caucasian. In the upper and lower extremities, then, the teeth, the maxilliary bones with their muscles, and the head generally, the differences between the two races of men are numerous and great. But it is particularly to those parts of the system that the Zoologist directs his attention, when looking for marks to settle his classification. Animals very much alike in other parts, are

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referred to different species and even genera, on account of striking dissimilarities in these.

But all the differences between the two races are not yet enumerated. In the African the stomach is rounder and the blood of a darker colour than in the Caucasian race. In their genital organs they also differ much from each other. In the African the penis is larger, and the testes smaller, and he has no fronum præputii. These circumstances are the more important, because they assimilate him, in the parts we are considering, to the male ape, and other inferior animals. Indeed, in those organs, he resembles the ape fully as much as he does the Caucasian. Noristheresemblance confined to them alone. It extends to the head and face, the arms, hands, especially the fingers and nails, the flatness of the sides of the chest, the bones of the pelvis and the muscles that cover them, the lateral flatness and thinness of the thigh, its depth in the opposite direction, its length compared to that of the leg, the forward

bend of the knee, the general form of the foot and its connexion with the leg, and the length and taper of the toes, together with the form and position of the nails. In fine, let a well formed Caucasian, an African possessing the real likeness of his race, and a large ourang-outang be placed along side of each other, and the gradation of figure, from the first to the last, will be obvious and striking. The Caucasian will be most perfect, the African less so, and the ape the inferior of the three. It will be found, however, that in several leading and characteristic points, the resemblance between the African and the ourang-outang will be nearly as strong, as between the former and the Caucasian. And if, for the common African figure, that of the Boscheseman or the Papua, be substituted, the strength of resemblance to the ape will be much increased. We had once an opportunity to examine the person of a Boscheseman, and we have a lively recollection of our conviction, at the time, that it did not, in figure, stand more

than midway between the large ourangoutang and the Caucasian. Among other peculiarities of form, that being had a very unsightly projection of the nates, produced, not entirely by muscle, but in part by a substance resembling in texture the protuberance on the buffaloe's shoulder, or the mossy tail of the Thibet sheep. We have seen apes with a similar production, only somewhat firmer. Near to each shoulder of the Boscheseman was another moss of the same anomalous substance. We were assured that both these, and those on the nates, were natural, and not the result of diseased growth. The likeness of the Boscheseman to the ape, in expression of countenance, as well as in shape, is so striking, as to be recognised by every one. The quick and peculiar movement of the eyes and brows, which so strongly characterizes the ape, is practised also by the human savage. In White's essay, then, on the "Gradation in man," there is much truth, and the author

might have carried his comparison further than he did.

We have already alluded to a striking difference, asserted by the late Dr. Good to exist between the vocal organs of man, and those of the ourang-outang and the pongo. Of the two latter he says, "They have a peculiar membranous pouch connected with the larynx or organ of the voice, which belongs to no division of man whatever, white or black. The larynx itself is, in consequence of this, so peculiarly constructed as to render it less capable even of inarticulate sounds, than that of almost every other kind of quadruped."

We do not pronounce this a positive mistake. But we do consider it highly improbable. Dr. Good's assertion is founded, we believe exclusively, on the authority of Camper, whose attainments, as a comparative anatomist, were superficial. More than a century and a quarter ago, Dr. Tyson dissected an orang, strictly scrutinizing its

vocal organs, and the following is his report on the subject.

"As to the larynx in our pigmy, unless I enumerate all the cartilages that go to form it, and the muscles which serve to give them their motion, and the vessels which run to and from it, and the membranes and glands; there is nothing that I can further add, but only say, that I found the whole structure of this part exactly as it is in man; and the same too I must say of the os hyoides." Again he says; "For the ape is found provided by nature, with all those marvellous organs of speech, with so much exactness, that even the three small muscles, which take their rise from the apophyses stytoides, are not wanting." Dr. Harlan, of Philadelphia, who is versed in the dissection of anthropomorphous animals, and whose accuracy, as a comparative anatomist, will not be questioned, testifies positively to the same fact. Between the organs of voice, in the ape tribe and in man, he has found a "precise resemblance."

The authority of Dr. Good, therefore, in his "Book of Nature," adds neither strength nor plausibility to the hypothesis he so pertinaciously struggles to maintain.

The domestic dog, the wolf, and the hyena, are acknowledged to belong to different species. Yet let a skeleton of each be prepared, and it will be much more difficult to distinguish one from the other, than to distinguish an African from a Caucasian skeleton. The same is true of the skeletons of the tiger and the large Asiatic panther. Indeed it is much easier to distinguish between the skeletons of a Boscheseman and a Caucasian, than between those of any two species of the cat kind, that are similar in size. We may safely add, that there is no more difficulty in distinguishing between the African and Caucasian skeletons, than between those of the horse and the ox.

Such, then, are the leading differences between these two races of mankind, not alone in the colour and texture of the hair and skin, but in many other important organs. With the extent of the effects thus before us, let us again advert to the causes, to which they have been ascribed, that, by a comparison of the product with the reputed source, we may the better ascertain what degree of natural relation exists between them.

We here repeat in substance what we have already stated more in detail, that to ascribe the production of the African race to a few abnormal births in the Caucasian, or the production of the latter to like irregularities in the former, as Dr. Pritchard has done, is to trifle with the subject. The cause is by far too restricted and feeble for the vastness of the effect. Besides, it is a deviation from established laws. And it would be an imputatation on the wisdom. consistency, and foresight of the Deity to allege that he had recourse to a departure from his own rules, to produce a very numerous race of men, necessary to the peopling of a large portion of the globe. It

would amount to a declaration that man was created under much less circumspection than the inferior animals; and that to remedy an evil resulting from such neglect, it had become requisite for the Creator to deviate from the ordinances of his own enactment. Nor can we speak more favourably of the attempt made to solve the problem, by inferences, on principles of analogy, drawn from changes produced by climate, situation and food, in hogs, horses, cows, sheep, rabbits, poultry, and other animals, domestic or wild. As the causes which are alleged to have thus changed those animals, have not also, in the same places and manner, changed man, are we, from such premises, authorized to conclude that they can change him? Because they have not produced a certain effect, notwithstanding the fairness of their opportunity to do so, is it sound logic, to infer that they are competent to it? Assuredly it is not. The very reverse is the legitimate inference. As the causes have long since changed the inferior

animals, and have not changed man, nor even shown a tendency to that effect, we are compelled to infer that they cannot do it. And did no prejudice exist on the subject, nothing could prevent the inference from being drawn by every one competent to the process of reasoning. The opposite conclusion is not merely unfounded; it is ludicrous. Its incongruity with the antecedent proposition is analogous to that of the school-boy derivation of lucas a grove, from luceo to shine, a non lucendo, because it does not shine. It alleges, by way of inference, that because a certain combination of agents have produced a given effect on one class of living beings, it will necessarily produce a similar effect on another class, although, under ample opportunities, it has never done so. This is the substitution of analogy and imagination for observation and fact, which constitutes the essence of hypothesis and sophistry. Man, we repeat, has lived in the places referred to as long as his domestic animals. Were the causes alleged,

therefore, capable of producing in him the alterations imputed to them, some share of the work would already be done, and the remainder would be in progress. But the case is otherwise. Man is neither changed, as his domestic animals are, in Piedmont, Bavaria, or Hungary; nor is any such alteration in him now going on. Each succeeding generation resembles precisely that from which it sprang; and such has been the course of things for centuries. The inference, therefore, we say, is plain and irresistible. Causes which change inferior animals cannot change man.

Yet it is alone on the influence of climate, situation, and modes of living, that the advocates of the hypothesis of the unity of the human race must rest their belief. To no other source can they look for causes at all proportioned to the magnitude of the effect, which they allege has been produced. If that fail them, they must abandon the contest, and remain inactive, or change their ground, and pass over to the opposite

party. To aid, then, in deciding the controversy, we shall now endeavour to give a brief, but correct and unsophisticated view of the relation between the alleged causes, and the conversion of one race of men into another. And first of climate, in the composition of which, whatever may be the latitude, temperature is the chief ingredient.

That this is an agent of great power, and that it produces a considerable change in man, will not be denied. However difficult it may be to designate the particular points of difference between them, it is a truth, that the inhabitants of different climates are not precisely alike. But a question all important to the issue of the present discussion is to be proposed and solved. In what part of the system of man is the change effected by climate seated, and how far is its cause competent to carry it? We have seen that the African differs from the Caucasian race, not alone in exteriors; not merely in the colour and texture of the skin, nails and hair; but in the figure, size, and

solidity of the bones and teeth, and in the form and dimensions of the muscles, brain, nerves, and other important parts of the body. Can climate produce all these changes, as well in the deep-seated as the superficial parts, and carry them to the extent requiste for the conversion of one race into another?

If this question be answered in the affirmative, matter in proof of it must be derived from one of the two following sources, or from both of them united. It must be shown, either that the conversion of one race into another has been effected by climate, as a positive event; or that, under the influence of that agent, the change is now in progress, and that, from the well known nature and power of the cause, there is good ground to believe it will be completed. But that neither of these conditions of the argument can be complied with, may be satisfactorily Were we to inquire of any enlightened physiologist, whether he perceives the slightest degree of the relation of cause and effect between a hot climate, and the peculiar form, size, and solidity of an African's bones, the figure and position of his teeth, and the shape of his muscles, he would reply in the negative. Not satisfied with this, he would probably add his firm conviction, that, in the nature of things, no such relation between them can exist.

That the subject may be fairly discussed, we shall make, for the occasion, two concessions; that mankind are the descendants of a single pair; and that, as heretofore admitted, that pair were Caucasians. Until changed by climate, their progeny were necessarily of the same race. To render our disquisition as acceptable as possible, we shall moreover assume, as its basis, the Mosaic account of the propagation of man. According to that, Noah was the ninth in descent from Adam; having been born and reared in the land of his forefathers, there is no reason to believe that he had deviated from them in race. We are authorized,

therefore, to assume it as a postulate, that he and his family were Caucasians.

When that household descended from the ark, they were eight in number, all of the same race, and by them the earth was to be peopled, with the several races which now inhabit it. As we possess no information to the contrary, we are bound to believe that physical causes were the same then that they are now. The influence of climate was no stronger, and could not, therefore, in a shorter time, produce in man the changes necessary for the formation of a new race. But, as already mentioned, in seven hundred and thirty-three years from the time of Noah's debarkation from the ark, a nation of the Ethiopeans existed; and a party of them, migrating from the Indus, the chief river of their native country, settled on the borders of upper Egypt. They had black skins, and features different from those of the ancient Egyptians, who appear, from their mummies, to have been Caucasians. Were the changes, which thus constituted a new race, the product of climate? A reasonable answer to this question can be derived only from the effect of climate, at the present time, and within the period known to history. And it must be negative. In seven hundred and thirty-three years, climate cannot now produce a new race; nor has it been able to do it, in that period, for the last two thousand years. If the following facts do not actually demonstrate the truth of this, they give to it such strength of probability, as is tantamount to demonstration.

It is near seventeen hundred years since the Jews were banished from their native country. Soon afterwards a colony of them migrated to the coast of Malabar, the climate of which is similar to that of the Indus, and settled among a people whose complexion is black. Their religion prohibiting them from intermarrying with the natives, they have kept their blood unmixed. The consequence furnishes, in the present disquisition, an argument which we deem unanswerable. No change in their race has been

produced. They are as perfect Caucasians now, as they were when they migrated from the land of Judea. They were visited some years ago, by Dr. Claudius Buchanan, who states, in his travels, that both in "complexion and features" they resemble very strikingly the Jews of Europe. If, then, in seventeen hundred years, of latter times, the climate of India has produced no change in the Caucasian race, is it probable that in seven hundred and thirty-three years from the subsidence of the deluge, it could have so entirely revolutionized it, as to convert it into another? We feel convinced that no one of intelligence will reply in the affirmative.

It is somewhat more than a thousand years since Persia, the god of whose inhabitants was fire, submitted to the yoke of the Moslemin. Rather than renounce their religion, a colony of the fire worshippers fled immediately to India, and settled there, amidst a people of a black complexion. Their descendants in that burning

region, are still known by the names of the Parsees. Like the Jews, they have been prevented, by their religious tenets, from intermarriages with the natives. No mixture of the blood, therefore, has changed them. Nor have they been changed by climate. Colonel Wilks, who is familiar with their appearance, assures us that they are a fine race of men, perfectly Caucasian in complexion, feature, and figure, and altogether dissimilar to the people around them.

Three centuries have elapsed, since the Portuguese colonized Zanguebar and Mosambique, on the eastern coast of tropical Africa; and, at a much earlier period, the same places had been settled, and considerable cities had been built in them, by large bodies of Arabian traders. But, although the colonists have been greatly reduced in number, and deteriorated in constitution, by the sickliness of the climate, and although their complexion has been somewhat darkened by the action of the sun,

no perceptible progress has been made in the conversion of them into a different race. In feature, figure, and hair, those whose blood is unmixed, are as dissimilar to the African now, as their ancestors were, when they migrated from Europe. The same is true of the descendants of the Spaniards, who settled in tropical America, in the early part of the sixteenth century. Where their blood has remained pure, their race is unchanged. They are Spaniards still in both complexion and features. Of the descendants of the English, who have resided in the West Indies, for several generations, the same may be asserted. With some loss of ruddiness of complexion, their English character is still complete. The Moors have inhabited some parts of tropical Africa, time immemorial; yet, neither in feature, complexion, figure, nor hair, have they, within a thousand years, made any more of an approximation to the negroes, than the negroes have to them.

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We venture to say, then, and speak confiddantly, that no case exists now, or has ever existed, of the conversion of the Caucasian into the African race, or even of the production of a tendency to it, by the influence of cli-Nor has the reverse event ever occurred. The African race has never, within the memory of man, or the reach of history, been changed by climate into the Caucasian; nor has the slightest tendency of the kind been produced by it. It is nearly two centuries since the Africans were first introduced into our own country. The eighth generation from the original stock is now living, and the race is unchanged. Those whose blood is unmixed, are as perfect Africans now, as their ancestors were, when they left their native country. As relates to the real characteristics of race, their complexion, hair, features, and figure, are unaltered. The stories propagated by a few, and credited by many, of their approximation to the Caucasian character, are ground-Observation disavows them; and

they owe their being to a spirit of theory, and a resolution to maintain per fas et nefas, the hypothesis of the original unity of man. Eradicate that spirit, and negroes will be no longer reported to be changing into whitemen. That many of them are improved, in personal appearance, by good fare and kind treatment, is true. So are our horses and oxen. But their races continue. They are horses and oxen still. Of the Africans in the United States the same is true. Vet had they even become lighter-coloured, the event would not have been surprising. On the contrary, it might have been considered natural, in the ordinary line of physical cause and effect. Black is the native complexion of the African, as fair and ruddy is of the Caucasian. And the depth of his colour is in proportion to the soundness and vigour of his health. When they are im paired, we know, from observation, that his complexion becomes lighter. Disease renders him pale, as it does the Caucasian. Remove him to a climate unfavourable to

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his constitution, and with the loss of his health and vigour, he will lose somewhat of the depth of his glossy black. Had the climate of the United States, then, actually diminished the darkness of the African complexion, the fact would have been explicable on the principles here stated, without being referred to any tendency to a change of race. But although negroes are best adapted to a tropical climate, where the temperature is uniform and high, yet our hot and long summers make such amends for our cold but short winters, that they retain, in the United States, both their health and complexion. We have seen many American-born Africans, of the seventh and eighth generations, whose depth and glossiness of colour, would render them remarkable in the country of their ancestors. Nor is the real character of their hair, features, and figure, any more changed than the colour of their skin. If their hair is longer, it is because they cover it, comb it, and are otherwise careful of it; circumstances which, at the same time, add

to its blackness. In house-servants, who are well clothed, cleanly, and healthy, and who receive a full supply of nourishing food, both the skin and hair are darker than in those who labour nearly naked in the field. So far is it from being true, as some contend, that the African is indebted to the tropical sun for his complexion. Besides, those parts of their bodies which are always and most carefully covered, and protected from the sun, are of the deepest black. Heat does not blacken them by changing their skin, as fire chars wood; a vulgar notion which many entertain. Even men distinguished in science, have mistakenly attributed their blackness to carbon deposited or generated in the rete-mucosum. In truth, their colour is the result of a specific secretion. The black pigment, in which it consists, is formed from the blood. But it is not carbon. It is not as combustible as that substance; nor can it be converted, by burning, into carbonic acid gas. The secretory process which generates it is, we repeat, specific. It is, moreover, as peculiar to those possessing black skins, and as distinctive of their race, as the process which produces castor is of the beaver, or that producing musk of the animal to which it belongs.

The correctness of the opinion, that the black pigment of the African skin is the result of secretion, has been questioned. But such slowness of belief only marks a want of knowledge in those who indulge it. Physiologists, who, if not the only judges, are certainly the best judges of the matter, cannot entertain a doubt respecting it. They know that every substance formed from the blood, during life, is the product of secretion. But that the pigment is thus formed, appears from the following facts. African children have but little of it at birth. Hence their complexion is not much darker than that of the Caucasians. Nor is the rete-mucosum so thick and full as it afterwards becomes. But, in a short time, and without the slightest exposure of the

children to the sun, the pigment is formed and deposited, and they become black. During the sickness of the African this colouring matter is absorbed. Hence his paleness. But, on the restoration of health, it is soon replaced, in common with other portions of his substance, when his complexion resumes its original darkness. The pigment is, also, removed by a burn or blister. For a time, the spot remains white. Nor has the action of the sun any influence in darkening it. But the part becomes black, although protected from the sun, as soon as the skin has recovered its healthy action. We need scarcely repeat, what is so familiar to physiologists, that secretion is the only source from which these several phenomena can arise.

Of all the notions that have ever been broached, respecting the cause of the black colour of the African, the most extraordinary is that which attributes it to a superabundance of bile in the blood; or to any sort of hepatic derangement. And that such an hypothe-

sis should have found advocates in distinguished physicians, may well increase our wonder. Yet such is the fact. Even the late Dr. Good was friendly to it.

It is known to every one, that, in tropical climates, the African race enjoy much better health than the Caucasian. And the reason Their hepatic system is not is obvious. deranged. The liver performs its functions freely; and there is, therefore, no bile in the blood. Did the African derive his blackness from a superabundance and "error loci" of that fluid, he would show it in his eyes (we mean the tunica albuginea) as well as in his skin. He would have the "black jaundice" all over. He would show it also in his alvine and urinary discharges. But we must no longer consume our time in "beating the air." Considering the health, size, strength, and longevity of the African race, the hypothesis that attributes their complexion to any kind of corporeal derangement, is unworthy of notice. Besides, admitting the possibility that a superabundance of bile might darken the skin, it could not also change the form, dimensions, and density of the bones, muscles, brain, and nerves. It could, in fact, do nothing but produce a diminutive, feeble, and short lived race, as widely different from the African, as from the Caucasian. Another physician of our own country, of great distinction, ascribed the African complexion to leprosy! As well might he have ascribed it to witchcraft, under the name of the "black art." That such notions, we say, should be entertained by any one, is surprising; but that physicians should defend them, is matter of amazement. We leave them, therefore, to perish in the dreams that produced them.

Is any one prepared to allege, in the form of an objection, that although the Caucasian cannot be changed directly and at once into the African race, it may be made to pass first into the Mongolian, Malay, or some other midway race, and by another step, into the real African? We reply, that this is mere conjecture, the change alleged

having never been witnessed. Nor is this all. The mode of reasoning resorted to, if it deserves the name of reasoning, is not only fallacious, but dangerous in its tendency. It is sliding gradually into error, as men slide into vice. Neither the physical nor the moral tempest blows in full force at first. The freshening breeze admonishes of the coming storm. Individuals do not perpetrate, as a first offence, either arson, or murder. Of intellectual deviations, the same is true. Men rarely plunge at once into the depth of error. They are reduced, step by step, unconscious of danger, until the flood overwhelms them.

The hazard attendant on the supposed mutation we are considering, arises from its having no stopping place. If man can be changed from a Caucasian, first into a Mongolian, a Malay, or an American Indian, and then into a negro, he may pass next to a Boscheseman, by another step into a golok, and again into something still lower. Each successive change is alike easy, and alike

probable. By such a process there will be no difficulty in changing horses into asses, zebras, or quagas, common black cattle into buffaloes, wolves into dogs, one species of the cat kind into another, eagles into hawks, geese into ducks, and grouse into partridges. Nor is it of the least moment whether these changes are produced by the influence of climate, or by abnormal generation. In either case the result will be the same. By an irregular generative process, the Caucasian race produces the Mongolian; by an irregularity no greater, produces the Malay, the Malay the common African, that the Boscheseman or the Papuan, that the Ourang-outang, that the Baboon, that the Monkey, and that something else; and still the last and most degraded belongs, like the first, to the family of man! and each change would be about equally great; and the occurrence of all is equally probable. Just as probable that a pair of Papuas are the progenitors of the ape, as that a pair of Caucasians are their progenitors; and the

reverse. And yet Dr. Pritchard seems inclined to a belief in such a scheme of metamorphosis.

But its foundation, we repeat, is conjecture, and it is conjectural throughout. History and observation being both opposed to it, it is not sustained by a single fact, No instance can be adduced, in which a Caucasian has been changed into a Mongolian, a Malay, or an Indian, any more than into an African. The reverse is equally true. There is no case either recorded, or now in existence, in which an African has been converted into a race midway between him and the Caucasian. Nor can an example be cited, where such a change is now in progress. It is not justifiable, therefore, to imagine one. In fine, the same reasoning which we have opposed to the hypothesis, that a Caucasian can be converted into an African, or an African into a Caucasian, applies with equal force against a belief in the mutation of any one race of men into another.

There is a law of living matter, with which the believers in such metamorphoses appear

to be unacquainted; at least they do not pay to it the observance it merits. And this law seems to be more powerful in man, than in the inferior animals. It is, that his system resists, from the begining, all causes, whose tendency is to injure or change it; and learns, by experience, to resist them successfully, unless their strength be regularly augmented. If opium be taken habitually and for a long time, its dose must be increased, or it loses its effect. Of arsenic and other poisons, the same is true. By gradually increasing the quantity employed, an individual learns, in time, to swallow, with impunity, as large a dose of them, as would destroy a dozen of men, who had never taken them before. By habit we become able to sustain, without injury, a degree of fatigue and exposure, that would have been destructive to us at the beginning. It is on this principle that acclimation or seasoning is effected. An individual who removes from a northern to a southern, or from a healthy to a sickly climate, becomes by habit, or what might be denominated constitutional experience, proof against the miasm which the atmosphere contains. Nor is the reason of all this concealed. It is, we repeat, at length, that the human system, resisting from the first, learns at length to resist successfully such agents as would injure or change it. And the law is universal. Its application to the subject before us is direct, and calculated, if we are not mistaken, to throw additional light on it.

Because a new climate has produced in man a given change, in a given time, we are not hence to infer, that in twice the time it will double that change, and treble it in treble the time. On the contrary, we shall find that, in a certain period, the human system will have learnt so to resist the climate, as to prevent all additional alteration. Nor will the change ever proceed so far, or even come near it, as to convert one race of men into another. In confirmation of this, instances innumerable might be addu-

ced. Let the supposed change be in the complexion and figure.

That a hot climate darkens the complexion, and alters somewhat the figure of the Caucasian race, experience has proved. But it carries the alteration only to a given point; and there this process forever stops. Nor are those in whom the change has been pushed to its utmost extent, and whose constitutions have learnt definitively to arrest its progress, assimilated any more really to the African race, than the progenitors were, who had never felt a burning sun or a heated atmosphere. Asia, Europe, and the United States, furnish abundant proof of this.

In the south of China the complexion of the inhabitants is considerably darker than in the north, and their frame less robust and vigorous. But the people are still Chinese; and no change has occurred in their complexion or figure for centuries. Nor will the process ever be carried any further. The system now resists completely the influence of the climate. Between the climate and the system, action and reaction are in equilibrio. Hence the physical causes which now bear on them will never convert the Chinese into a different race.

To Hindostan similar remarks may be applied. In its southern provinces the complexion of the people is darker, and their figure slenderer than in those of the north. And this is the effect of climate. But throughout the empire the race is the same. In that the influence of climate has made no change. Nor will it ever do so. For untold ages its power has been balanced, and its action neutralized, by the resistance of the constitution of the inhabitants. Hence, in the north and the south, the Hindoos have the same forms and complexions now, that have distinguished them for nearly two thousand years.

In Arabia, the natives of Yemen are somewhat darker than their northern countrymen. Nor are their frames so robust and powerful. But they are still Arabians.

Climate has had no power to assimilate them to the Africans, in either complexion or figure. Their race is identical with that of the ancient Assyrians, from whom they are descened. In complexion and form they are now stationary, and have been so since the earliest period of their history.

In the south of Europe the inhabitants are imbrowned by the climate; nor are their figures precisely the same as in the north. But, throughout the civilized portion of the continent, the race is one. Climate has not touched it. The swarthy Spaniard and the olive-coloured Italian are as real Caucasians, as the fair German and the high-complexioned Swede. And in both complexion and figure, the natives of every section of Europe have long been stationary. For many centuries their systems have resisted successfully the action of climate. Hence they will sustain no further mutation. Even in France and Spain, considered as insulated nations, a similar condition of things prevails. In the northern and southern provinces of those two kingdoms, the complexion and figure of the inhabitants differ. In the warmer regions, the skin and hair are darker, and the body of more limited dimensions. But the race is every where the same. And for hundreds of years the complexion and figure have suffered no change. They are now adapted to the climate, whose influence is therefore balanced by the resistance of the system.

Nor is the case otherwise in our country. In the southern states of the Union, the human complexion is darker than in the northern, and the persons of the inhabitants taller and slenderer. But in every section the race is the same—Caucasian throughout. Climate has made no more impression on it, than on the rocks of the land, or the waves of the ocean. Nor is any further change in progress. The human system, in the south, is now in equilibrio with the climate, and mutation has ceased. In time to come, the descendants will resemble their parents,

in complexion and figure, as they have done indeed for the two or three last generations.

There exist in Europe two descriptions of people, who present to the eye of philosophy phenomena somewhat peculiar, and entirely corroborative of the views we are maintaining. They are the Jews and the Gipseys. The former migrated to their present abode, within the first six or seven centuries of the christian era, and the latter about five hundred years ago. They both came from Asia, and brought with them the colour and features of the east. The complexion of the Gipseys was much the darkest; and so is that of their descendants. But in neither Jews nor Gipseys has the climate produced any material change. They both retain their national appearance with an obstinate steadiness, which no physical influence can shake. Notwithstanding the declaration of Buffon to the contrary, which has been so repeatedly referred to by inferior writers, a Jew is known, by his complexion and features, wherever he is seen.

And so is a Gipsey. We have seen individuals of that wandering race, born and reared in England and Germany, whose complexion was nearly as dark as that of the Hindoos, from whom they are descended. Although the Jew and the Gipsey, of the south of Europe, may be somewhat darker than those of the north, they are so strikingly similar, that they can never be mistaken for a different variety; much less for a different race. We need scarcely add, that neither in colour, form, nor feature, is any change going on in them now. In those respects, they are as stationary as the people among whom they dwell. We shall only subjoin, that were the climate, under any circumstances, competent to the effect, it would certainly change the Gipseys, whose roving life, scanty and tattered clothes, and houseless condition, exposes them fully to its direct influence. Could no other arguments to the same effect be adduced, the natural history of those two descriptions of people alone would be fatal to

the hypothesis, that climate can either form or change the races of men. When all the facts which present themselves in opposition to that notion are dispassionately considered, it is matter of surprise to us that it has ever been entertained by intelligent inquirers. And we firmly believe that by such inquirers it never would have been entertained, had their minds been free from the influence of certain dogmatical expounders of Scripture.

Thus do we consider our position made good; that no instance can be adduced, where the influence of climate has converted one race of men into another; or where any change to that effect is now in progress. On the contrary, as far as all known facts may avail, and as far as a negative can be proved, the reverse is established.

But say some of our opponents, to account for the production of the several races of mankind from a single stock, the influence of different kinds of food, and different modes of life, must be united to that of climate. And such union they pronounce competent to the effect contemplated.

Our notice of this element of the hypo thesis shall be brief, because we deem it of little weight. We simply call for the facts and principles on which it is founded; and if they cannot be adduced, the failure must be received as evidence that they do not exist. Where, then, we ask, is the instance, either on record, or now in being, in which any sort of food, combined with any mode of life, and any climate, has either changed one race of men into another, or even perceptibly modified a race? Can any instance of the kind be referred to. even under the joint influences of all the physical causes, whose action can be united? Without fear of contradiction, we answer, no. Some kinds of food are more nutritive and salutary, and some modes of life more favourable to health and strength, than others. But this is the whole amount of their influence. They can, therefore, improve or deteriorate a race, but never change it. The conception of their possessing such power is even ludicrous, and well calculated to be made an object of ridicule. As if food of one kind and colour. could render the complexion black, of another tawny, and of another fair; or as if a diet of flesh could assimilate the consumers to the figures of the animals to which it belonged. Those who indulge in such fancies, can find no difficulty in accounting for the degraded condition of the Boscheseman, who live on snakes and lizards, beetles, worms, and pismires, and contend with the hyena for the putrid carcass of an antelope or a buffalo. Physiologists know that the chyle and blood, the true fountain of nourishment, formed from all kinds of diet, are alike. No one can tell, by examining them, from what substances they are derived. know that the contrary of this is asserted; but the assertion is unfounded. We have seen the trial repeatedly made, and it has uniformly failed. Food, therefore, is eaten

and digested not to give figure and colour, but to receive them.

As respects particular pursuits or kinds of business, they modify somewhat the form of the body. The London boatmen, who, from their boyhood, exercise their upper extremities much and their lower ones but little, have thick arms, large hands, broad chests, and brawny shoulders, while their thighs, legs, and feet, are comparatively small. Some kinds of handicraft also, when long and closely pursued, produce in the body a characteristic flexure and attitude. But all this goes not a hairbreadth toward a change of race. English boatmen, tailors, weavers, and shoe-makers, although neither Apollos nor Adonises in form, are as real Caucasians as English noblemen.

There exists yet another objection, which we deem unanswerable, to the hypothesis, that the negro is produced from the Caucasian race, by a hot climate. A large portion of the inhabitants of Oceanica, whose climate is, in many places, temperate and

pleasant, are Papuas, or Australian negroes. New South Wales extends beyond the 39th degree of south latitude, and has, in many large sections, a climate peculiarly delightful and healthy. Yet the following is the description of its native inhabitants, given by Malte Brun, in his Universal Geography. "New South Wales seems to offer three native varieties of inhabitants, all belonging to the race of Oceanian negroes. In the neighbourhood of Glasshouse Bay, the savages have large heads, which, in shape, resemble those of the ourang-outang. Their very limited intellects, their hairy bodies, and habitual agility in climbing trees, seem to bring them near to the monkey character." In many other parts of the Oceanian continent, whose climate is by no means intensely hot, the inhabitants are of the same degraded character with those of New South Wales. They have woolly hair set in tufts, a skin of a soiled and faded black, narrow, low, retreating foreheads, flat noses, thick lips, a projecting muzzle, large and strong maxillary bones and teeth, and a defective chin, or rather no chin at all, their mouth being placed almost at the bottom of their face. Their stature is short, and their intellectual endowments exceedingly limited. They are, in all respects, inferior to the negroes of Africa. The projecting muzzle and defective chin of these beings are peculiarly worthy of attention, as they constitute striking features in the countenance of the ourang-outang, and other families of inferior animals.

Nor has the climate any apreciable influence in modifying the colour of the aboriginal inhabitants of the continent of America. Throughout the whole range of climate, from the extreme north to Cape Horn, the American savage, whether he inhabits mountains, plains, or valley, the banks of rivers, or waterless prairies, has a complexion of nearly the same shade. Nor is there any variety in the deep raven blackness of his hair.

Some of the articles of evidence, adduced by Dr. Pritchard himself, in proof of identity of species, fail, or rather oppose him, as relates to the present question. One of them is, that beings of the same species attain, by nature, to the same age. This erects a specific barrier between the Boschesemen and the rest of mankind. Among that degraded race longevity is unknown. The most protracted term of life with them does not exceed fifty years. They are old and withered at forty. Nor is the region they inhabit a sickly one. The seeds of early death are implanted in their organization. Shall we be told that the shortness of their lives is owing to the scantiness of their food, and the exposure and hardships they are compelled to undergo? We reply, that other savages, who are as severely exposed as they are, and often suffer for want of food, attain to a much more advanced age. The human constitution is exceedingly flexible, and learns to accommodate itself, without sustaining much injury to external circum-

stances. Were the Boschesemen therefore, identical with other races of mankind, there is ground to believe that the term of their life would be nearly the same. As we do not, however, attach much importance to this supposed criterion of species, we have now adverted to it only to show that, feeble as it is, our author cannot avail himself of it, in support of his hypothesis. In submitting it to his readers, he did not perhaps recollect, that if it were true, we are not of the same species with our antediluvian progenitors. Their life extended to many centuries, while ours rarely reaches to one. Dr. Pritchard specifies a liability to the same forms of disease, as another mark of identity of species. But it is well known to the observers of nature, that dogs, cats, horses, and hogs, are subject to bilious affections in common with man. "The yellow water" of horses is a true bilious fever; and we have known multitudes of cats, and many dogs, to die of bilious diseases, in the summer season, when human beings were suffering from the

same complaint. Hogs are liable also to scrofula, measles, and influenza. To hydrophobia, tetanus, colic, and the disease produced by the bites of serpents, numerous races of the inferior animals, especially our domestic animals, are subject. According to our author's views, then, they all belong to the same species with each other, and with ourselves! We shall close our strictures on the reputed causes of changes in mankind from one race to another, by observing, that they are so trival and insufficient, that the very reference to them, by our opponents, proves the desperate condition of their hypothesis. It is only the drowning man that grasps at straws.

It is singular that in the discussion of the question respecting the several races of men, mere animal or organic differences, we mean those of a corporeal character, have been almost exclusively attended to. As far as our recollection serves us, those of morals and intellect have never received the consideration they deserve. Yet we ven-

ture to assert, that, in their aggregate, they are no less striking and characteristic than the others. Nor are they less distinctive as attributes of race. We trust, therefore, that a brief notice of them will not be without interest. We deem it moreover well calculated to shed light on the subject we are discussing.

As relates to intellect, a vast pre-eminence belongs to the Caucasian. Nor is this, as many contend, exclusively the result of a better education. It is as truly the gift of nature as his complexion and figure. As well may the fine proportions of his head, and the symmetry of his features, be pronounced the mere issue of training, as the endowments of his intellect. They result alike from the original superiority of his organic nature.

In the history of man, there must have been a time, when the Caucasian was as uninstructed as the African or the American Indian. Like them, he must have once been "nature's simple child." Wherefore,

then, in the career of intellectual improvement, has he left them at such an immeasurable distance behind him? And why is thist he case, not accidentally and in some places, but always and uniformly, wherever he is found? The answer is easy. superior to them in native intellectual faculties. He is so endowed, by reason of a higher and better organization, that he can instruct himself, by attending to the objects of nature around him, observing their phenomena, and studying their laws. In other words, he can read and interpret the book of nature, the true source of knowledge and wisdom, and thence derive instruction. And thus, of necessity, did his education begin. But this the African and the Indian cannot do; at least, they cannot do it with the same facility, and to the same extent, because they are inferiorly organized and endowed. Nor for the same reason, can the Mongolian and the Malay thus amply instruct themselves. Nature has been less bounteous to them than to the Caucasian race. To the eye of a competent judge they bear, on their aspect, the stamp of inferiority. Nor is it possible for it to be otherwise, unless they were differently organized; for organization is as much the source of intellectual as of muscular power. Were the present a suitable occasion to dwell on it, all this is susceptible of proof.

To the Caucasian race is the world indebted for all the great and important discoveries, inventions, and improvements, that have been made in science and the arts. Without specifying any of them, we say all, and do not speak extravagantly. The African and Indian races* have not made one; the Mongolian none that are really great. The Caucasian race make such uniform and rapid progress in intellect-

^{*}To this the invention of the Cherokee alphabet forms no exception. The author of that has much Caucasian blood in his veins. His father was a Scotchman. He is, therefore, a half breed. Nor is this all. The train of thought, which led to the invention, was first awakened by a letter written by a whiteman. Without the influence of that "speaking leaf," the alphabet would yet have had no existence. It is virtually, therefore, a Caucasian production.

ual improvement, that every succeding generation is far in advance of that which immediately preceded it. So true is this, and so great and striking the advance in knowledge, that could Vaucanson, Black, and even a Newton, return to earth, they would find themselves but little more than novices in many parts of their favourite sciences. But what, in this respect, is the condition of the African and Indian races? Motionless; fixed to a spot, like the rocks and trees, in the midst of which they dwell; each generation pursuing the same time-beaten track, with that which went before it. Even century succeeds to century, and the last finds them the same degraded and unimproved beings with the former. We speak not of the Africans who have mingled with the Caucasians, and acquired some smattering of their knowledge. We refer to those confined to their native country, and the society only of their own race. And we are justified in saying, that for the last five hundred years, or to as early a period as

our acquaintance with them embraces, they do not appear to have advanced of themselves a single step in the knowledge of nature, or the practice and improvement of the arts. Even under all the instruction that can be imparted to them, their intellectual inferiority remains proverbial. few among them who acquire a very moderate share of knowledge, can scarcely be said to constitute an exception to the general rule. Under all the circumstances of the case, we do not hesitate to repeat our conviction, that the stationary condition of the Africans and Indians, contrasted with the rapidly improving one of the Caucasians, constitutes between the races a distinction as characteristic and strong, and much more important, than the differences in the form of their features, and the colour of their skins. Nor is the one more radical and immoveable than the other. As easily may a tribe of Africans or Indians be rendered white in their skins and comely in their features, as equal to the Caucasians

in intellectual endowments. To effect either, a change of organization is essential. As relates to the mental cultivation and improvement, the Indian and African races resemble the inferior animals. They do not profit by experience. The descendants equal their progenitors, but do nothing more. The former do not, as is the Caucasian practice, begin where the latter terminate, and make further advances. If the son can imitate the sire, he is content, and cherishes no ambition to surpass him. Hence, as already observed, each generation grovels through the same humble course, without attempting to arise above it, or appearing to know that there is any thing better.

Let tribes of Africans or Indians be instructed, during a life time, in science and the arts, by Caucasian teachers, and then be abandoned to themselves; from that period, instead of advancing in knowledge, or even retaining what they have received, their course will be retrograde, until they shall have returned to their original igno-

rance. In truth, as races, they are not made for science and learning. Nor, as already stated, can a few individual exceptions prove the contrary. As there are Caucasian imbeciles, so are there some Africans and Indians more highly gifted than others. Our remarks have respect to races; and of them they are true, as time and experience will ultimately prove. They have indeed proved it already.

Nor are the moral deficiencies of the Indians and Africans less striking. As they have never produced a Cicero, a Bacon, or a Shakspeare in talent, neither have they given to the world the great example of a Cato, an Alfred, or a Washington in virtue. No point of time can be indicated when the Caucasians were real savages. Barbarians, in a comparative point of view, some communities of them may have been, but nothing more. All history bearing on the subject shows, that actual savagism has existed only in the Mongolian, Indian, and African races.

Cannibalism appears to belong exclusively to the African and Oceanian negroes, the Hottentots, and the Boschesemen. To these the Caribs may possibly be added.

We do not know that the individuals of any other race have ever exhibited the revolting spectacle of gorging themselves, of choice, with human flesh. We are convinced that no instance can be adduced, in which the Caucasians have done it. All representations to that effect are fabulous. Nor can we refer to any community of that race in which the promiscuous intercourse of the sexes has been publicly countenanced. We believe that none such has existed. But among Africans, and some of the Oceanian hordes, the case is different. Their intercourse is as loose as that of apes and monkies.

The native bent of Caucasians is to civilization. Of the North American Indians, the reverse is true. Savagism, a roaming life, and a home in the forest, are as natural to them, and as essential to their existence,

as to the buffalo, or the bear. Civilization is destined to exterminate them, in common with the wild animals, among which they have lived, and on which they have subsist-All experience admonishes of this. In numbers the Indians and huffaloes of our western wilds diminish alike and from similar causes. And they retreat alike from civilization. Neither of them can flourish in a domesticated state. As soon, and as much in conformity with nature, shall the olive be fruitful on the coast of Labrador. Every effort hitherto made to civilize and educate the Indians, has but deteriorated them, and tended to annihilate them as a people. And such, from their moral constitution, must continue to be the case, until the race shall become extinct. Let the history of the Indians of New-York, and New-England, be consulted, and such is the only lesson it will teach. And it will teach it conclusively. Nor, when fairly interpreted, does the history of the Creeks, Cherokees, and Chickasaws, inculcate a

different one. It speaks oracularly of the extinction of the aborigines. But one expedient exists, by which a trace of them can be saved; intermarriages with another race. By the requisite means, half and quarter-breeds, and those having still less of the Indian in them, may be educated, and rendered useful members of civil society. But as readily shall the wolf and the fox become faithful house-dogs, as the entire Indian a civilized and cultivated man.

We know that, by the avowal of these sentiments, we are opposing the opinion, and perhaps exciting the prejudice of a respectable portion of the American community. But however deeply we may lament this circumstance, it cannot alter our views, and must not restrain the freedom of our communications. Believing the sentiments to be both true and important, we express them fearlessly, and are willing to be judged of, and dealt with, according to the final issue of the controversy. Deeply impressed with them as we are, we cannot enter

into the schemes of those who are so zealously labouring to civilize the Indians, and render them agriculturists, instead of hunters. However benevolent the effort may be, it is wanting in wisdom. It is in opposition to the nature of the savage, and must necessarily fail. The time and means so lavishly consumed in it, are misspent, and ought to be appropriated to other purposes, where knowledge, enterprise, and perseverance might be more successful, and be productive of good.

The truth is, that the Indians were formed, fitted, and intended to inhabit uncultivated forests, and wild prairies. To rove through them, and subsist on game, their aptitude is complete. But as soon as civilization shall have converted those places into fruitful fields, meadows, and gardens, their primitive inhabitants will be no longer wanted. On the contrary, they will be beings out of place, and without a home adapted to their nature. The issue is plain. They will cease to exist on the same prim-

ciple of adaption that called them into being. In the scheme of creation, and of populating the earth, they have been useful and necessary; but the time is approaching when they will be so no longer. They have been requisite to people the woods and wilds; and in them alone lay their enjoyment. But those retreats being destroyed, and their home rendered to them a place of desolation, their extinction will be a dispensation of kindness, not severity. It will be in harmony with nature. To cultivated Caucasians the extinction of their race would be preferable to a compulsory conversion to savagism. Nor to beings constitutionally savage as the Indians are, is civilization less abhorrent. The wilderness, then, having been deprived of its savage character, and requiring no longer savage inhabitants, the Indians will have finished their work, and been rendered useless. But in all her operations, nature is wise, and keeps nothing in being that is either superfluous or dislocated. She has a fit place for every thing that ought to exist. On this ground we repeat, the destiny of the Indian is fixed.

The years of his race are not only numbered; they are comparatively few. If confidence may be reposed in the lessons of the past, or the appearance of the present, such are the portentous prospects of the aborigines.

The elephant does not breed in a domesticated state, because its spirit is broken by submission to the voke. In like manner is the wild and independent spirit of the Indian broken, by the yoke of civilization. He feels degraded under a consciousness that he can never distinguish himself in a condition of such perfect inaptitude to his nature. When roaming the forest, he knows himself to be chief of the forest animals. pride swells at the thought, and he bounds along with the elastic lightness of the stag he pursues. But, in a state of civilization, he feels himself inferior to every thing around him. He is therefore humiliated and degraded in his own opinion, and resigns himself to the gloominess of stubborn desperation. He sees the end of his race approaching, and cares but little how rapidly it advances, or how soon it arrives. Without meaning, therefore, to touch the policy of the present question, respecting the course meditated by government toward the southern Indians, we are convinced that the only method to protract the existence of that people, as a distinct race, is to send them into the forest. Between that and their speedy extinction, there is no intermediate step, but intermarriages with another race. The real Indian will then disappear; but his hybrid offspring will retain his blood, and exhibit, for ages, somewhat of his appearance.

We have observed that an intercourse between the Caucasians and the Indians deteriorates the latter. The remark is true, and the degeneracy of the savages has been generally charged to the former as a fault.

The Caucasians are said to have always wronged the Indians, brutalized them by ardent spirits, and schooled them in vice instead of virtue and knowledge. We re-

ply, that this has not been always the case. In many instances benevolent and persevering efforts have been made to instruct and reform the Indians; but in vain. No improvement in morals, and but very little in knowledge, has been the issue. Nor is the reason difficult to be discovered. It is found in the great preponderance of the Indian's animal propensities over his moral sentiments and powers of reflection. This preponderance renders him more of an animal than of a human being. But civilization and its virtues are attributes of humanity, not of animality. Hence they are no more in real harmony with the nature of the Indian, than with that of the buffalo or the bear. The one, therefore, can be trained to moral observances almost as easily as the other.

Why does the Indian drink intoxicating liquors to excess, and learn degrading and vicious, rather than elevated and virtuous practices? The answer again is plain, and is the same with that already given. His animal

feelings preponderate, and absorb all others. They constitute collectively his ruling passion, and that is the master spring of action in every thing that breathes. By this allcontrolling power, therefore, the Indian is brutalized. Nor can he change it, any more than he can change the colour of his hair, because it is the result of his organization. But the animal propensities are the source of every viee, and have alone a relish for it. Hence the effect of ardent spirits, and evil practices, such as cruelty, murder, theft, treachery, and all kinds of sensuality, are gratifying to them. In perpetrating these acts, therefore, the Indian follows his nature. He is not beastly merely because he has indulged to excess in intoxicating liquors. He drinks to excess because he is, by nature, beastly; and his intemperance only renders him more so. He does not learn vicious practices from Caucasians, because they attempt to teach him no others; but because he has no relish for any others; because no others are gratifying to his an-

imal appetite. Examples of virtue are lost on him. He feels them but little more than the dog that follows him, or the game he pursues. Why are not other races of men as easily seduced into vice, and as readily destroyed by strong drink, as the Indians? Because their animality is not so preponderant over their moral nature. The same overwhelming strength of their animal feelings which prevents the civilization of the Indians, impels them to practice intemperance rather than sobriety, and to learn vice rather than virtue. The imputation of the intemperance and other vices of the Indians to the Caucasians, is like referring to the seductions of the Devil, the sins which individuals commit, in consequence of the predominancy of their animal propensities. Were those, who are said to be thus led into vice, better organized, the temptations of the EVIL ONE would not prevail. manner, were the Indians better organized, they would not learn from the Caucasians their vices alone. In learning nothing but

their vices, therefore, they manifest the unconquerable strength of their own animal nature, and the hopelessness of their condition, as relates to reform.

Whatever amendment may have taken place in the condition of the Indians of the west and south, (and it is far below what report would make it,) is to be ascribed chiefly to a mixture of races. Half breeds, as already mentioned, may be somewhat civilized and instructed; and they are, for the most part, chiefs and rulers. The present generation of real Indians are similar to their progenitors, except in the use of the hatchet and scalping knife. And in that they are restrained by necessity and fear. Give them an opportunity to do it with impunity, and they will riot in blood as ruthlessly as their forefathers. moral character, then, we say, of the Indian, especially his radical unfitness for civilization, constitutes between him and the Caucasian a much more important line of distinction, than the difference in the

form of their features, and the colour of their skin.

For evidence corroborative of our views respecting the character, condition, and prospects of the Indians generally, but especially of the Cherokees, we might refer to a late state paper issued at Washington, entitled, a "Report from the Committee on Indian Affairs, respecting the removal of the southern Indians." That document, which is written with no common ability, is the result of long and patient inquiry by the members of the Committee. It is fairly presumable, therefore, that its statements are correct. From many passages to the same effect, we extract the following:

"The true nature of the calamity which threatens them, (the southern Indians,) and from which some power, competent to save them, is invoked, by so many considerations of generosity and pity, will be partially understood, when the fact, which to many must be incomprehensible, is stated, that out of a population of 60 or 65,000 souls,

in the enjoyment of twenty or thirty millions of acres of fertile land, 50 or 55,000 may be said to have no property at all, and that a large portion of them are in fact, below the condition of the common paupers among the whites."

Again; "The number of those who control the government (of the Cherokees) are understood not to exceed twenty-five or thirty persons. These, together with their families and immediate dependents and connexions, may be said to constitute the whole commonwealth, (consisting of 12000 souls') so far as any real advantages may be said to attend their new system of government. Besides this class, which embraces all the large fortune-holders, there are about two hundred families, constituting the middle class, in the tribe. This class is composed of the Indians of mixed blood, and white men, with Indian families. All of them have some popularity, and may be said to live in some degree of comfort. The Committee are not aware that a single

Indian of unmixed blood, belongs to these two higher classes of Cherokees. The third class of the free population is composed of Indians, properly so denominated, who, like their brethren of the red race every where else, exhibit the same characteristic traits of unconquerable indolence, improvidence, and an inordinate love of ardent spirits. They are the tenants of the wretched huts and villages in the recesses of the mountains, and elsewhere, remote from the highways, and the neighbourhood of the wealthy and It will be almost incredible to prosperous. those who have formed their opinions of the condition of the Cherokees from the inflated general accounts found in the public journals of the day, when it is stated, that this class constitutes, perhaps, nineteen out of twenty of the whole number of souls in the Cherokee country."

Although not explicitly so stated, it is palpably the opinion of the Committee, that the Indians cannot be civilized; but that the effort to that effect will extinguish them.

As relates to the original unity of man, we shall submit one consideration further, which we deem of some weight. Throughout the entire works of nature, we discover an unbroken scheme of aptitudes. Every object and every class of objects harmonize with the various influences under which they are placed. This is especially the case as relates to the animal kingdom. Each class of animals inhabits the region and climate most congenial to its nature, where, of course, it experiences the greatest amount of enjoyment, and attains the highest perfection and vigour. The rein-deer and the white bear belong to the north, and could not subsist in any other region. The stag and bison find their most suitable home in a temperate climate. And the lion and the camel attain their greatest perfection near the sun of the tropics. And in those several regions are these animals now found; and there we believe they were placed at the beginning. We cannot imagine that they were formed originally with constitutions suited to other climates, and left to find their way to the places which they now inhabit, through danger, difficulty, death, and a modification of their nature amounting almost to a radical change. Such a belief would be preposterous, and highly disrespectful toward the AUTHOR of nature. It would impute to him not only a want of wisdom, but a disposition to treat his creatures with wanton severity. To place originally each species of the inferior animals in a situation and climate congenial and salutary to it, would seem to be most beneficent and wise, and therefore a procedure most worthy of a God. And such we doubt not was the primitive arrangement.

Why, then, should it be otherwise, as relates to man? As respects a place of residence, wherefore should he have been less cared for, and worse accommodated, than the inferior animals? Reasons might, perhaps, be given, why he should have been an object of more attention; but none, why he should have been one of less. Yet there

are on earth, climates and situatious more and less suitable, as places of residence, to the different races of mankind, as well as to the different kinds of inferior animals. All experience testifies that tropical Africa is out of harmony with the constitution of the Caucasian race. That people cannot inhabit it without suffering sickness, mortality, and great degeneracy in strength, longevity, and general character. It is exceedingly doubtful, whether, under any circumstances, they could become sufficiently prolific and durable in it to give birth to a nation. Facts seem to authorize the belief that they could not. Instead of increasing in numbers, Cancasian colonies planted there have uniformly diminished, until most of them have become extinct.

But tropical Africa is the native climate of the negro race, where they enjoy most health, live to the greatest age, and attain the highest perfection of their nature. It is as really their home, as the arctic circle is of the polar bear. As it evidently com-

ported, then, with the scheme of the population of the earth, that tropical Africa should be inhabited by human beings, aptitude called for the negro race, as the best suited, if not alone suited, to the climate and situation of that portion of the globe. But how was that race to be brought into existence? Was it to be done originally, by a creative act, and in a short time, at an early period of the world? Or slowly, and at a much later period, by a gradual change of another race? Which process accords best with the beneficence of the Deity, and his general procedure in stocking the earth with animals? To us the question seems easily solved. The former method is in every respect preferable

A negro race created originally and planted in Africa, would enjoy at once the privileges and favours conferred by their Creator on other beings. No painful and lingering change in their constitution would be necessary to fit them for their place of residence. They would be healthy and happy, vigorous

and fruitful from the beginning, and the country would soon be peopled by their descendants. No degeneracy would occur in the race, on account of a want of adaptation to the climate. The aptitude which prevails in all other parts of creation, would prevail also here.

But how different would have been the case, on the supposition that the only origiginal stock of mankind was the Caucasian, and that from that race tropical Africa was to be peopled. The very presentation of the problem, demonstrates the inconsistency of the scheme with the wisdom and benevolence of the Deity. We might add, that it demonstrates its impracticability, according to the known laws of nature. But waiving its impractibility, and making the best of it, before Africa could be thus peopled with a race adapted to its climate, millions of human beings must be sacrificed to the experiment, from the sickness that would ensue. Nor is that the worst view of the subject. The sacrifice would be made to convert a superior race into an inferior one; for no one will deny that the Caucasian is the more excellent. Not only, then, would there have been an immense loss sustained, in the process of forming the African race; the result of the process would have been an additional loss, in as much as it would have consisted in an exchange of a better commodity for a worse one. The transaction would have resembled that of an individual. who, possessing a stock of Arabian horses, would destroy great numbers of them, in a project to convert a few into a breed of asses. Such a schemer would be pointed at as a monument of folly and cruelty. Who will venture, then, to charge Deity with a course of procedure that would disgrace a mortal! Shall we be told, in reply to this, that the ways of Providence are inscrutable, and ought not, therefore, to be made a subject of research? We answer, that they are also wise and beneficent, and accomplish always the best ends by the best means. Being moreover in strict accordance with

reason, we deny that rational beings are forbidden to inquire into them. Nothing but priestcraft would decree the interdict; and nothing but superstition and weakness will obey it.

But it is puerile to thus toy with the subject. Nothing short of the Almighty power that formed the Caucasian race, can convert it into the African. The influence of climate. food, and modes of living, can never do it. And to speak of its being done by a few anomalous Caucasian births, is folly. To render the absurdity of the scheme of conversion by climate the more striking, let us subject it briefly to a farther analysis. A colony of Caucasians migrate from their native country, and settle in tropical Africa. To them the climate Their fate is certain. has pestilence in it. Accordingly they are attacked by disease, many of them die, and, in a generation or two, the race is greatly enfeebled and degenerated. And still they are Caucasians. Not an approach is made by them yet to the real African figure and

complexion. Nor is any moral or intellectual assimilation produced. The work of positive conversion is yet to begin. And it is herculean. A revolution is to be produced not only in figure, colour, and feature, but also in stature and strength. The African is a large and powerful race; while the descendants of Caucasians, born in Africa, are diminutive and feeble. How, then, while under the influence of the same sun and atmosphere, which debilitated their forefathers, and reduced themselves toward the condition of dwarfs, can their offspring change, and pass into large and powerful Africans? Can the Shetland poney, while in its native climate, produce the war-horse; or the small black cattle of Abyssinia the Lancashire ox? In the very propounding of them, these questions are answered in the negative, from the folly that would attach to an affirmative reply. Yet such a reply would not be more absurd, than the hypothesis, that the Caucasian race, shattered in health and strength, and rendered diminutive in size, by the climate of tropical Africa, could become the progenitors of the large, healthy, and powerful people, who inhabit that country. Were such a phenomenon to present itself, the metamorphoses of Ovid, and the visions of Plato, might cease to be regarded as sophistry and fable. In singularity and unexpectedness, and its inconsistency with the ordinary laws of nature, reality would equal them.

Dr. Pritchard himself acknowledges the peculiar fitness of different races of men to inhabit different climates. The Caucasian he pronounces best suited to temperate, and the African to torrid regions. He even confesses, that by an interchange of climate, planting the former under a tropical, and the latter under a northern sky, the health of each is materially injured. We put the question to him, then, had he himself the superintendence of the peopling of the globe, how would he proceed in executing the task? Would he form, at first, a race of men suited to each climate, where they

might enjoy health and comfort from the beginning? Or would he create only a single race, which, in undergoing the requisite change, would have to pass through centuries of sickness and misery, and sustain the death of millions during the process? We answer for him, that both his good sense and good feeling would induce him to adopt the former scheme. From the latter he would recoil in horror. But he will not arrogate to himself more of wisdom and benevolence than belongs to God.

As a last resort, our opponents refer the conversion of one race of men into another, to the power of the Deity miraculously exercised. It was necessary, say they, to have negroes to people tropical Africa, and parts of Oceanica, and therefore God formed them out of Caucasians, and conveyed them to their destined places of abode. This is unworthy of a reply. It is an outrage not only on common sense, but on soundness of principle. It charges the Deity with imperfection equal to that of

man. It alleges that when he created the human race, he did not foresee their destiny. Hence he formed them improperly, and was obliged to remodel them, thus profiting, like themselves, by experience and error. Besides, such a miraculous change would be tantamount to a new creation; and would prove that men are now of different species, although they were originally of one.

Dr. Pritchardhas endeavoured to strengthen his hypothesis, by referring to some resemblance, real or fancied, which exists between a few words belonging to the languages of different nations. From this circumstance he feels authorized to believe, that those nations were originally the same; and that all nations, whose languages thus resemble each other, are of the same stock.

In this opinion we cannot concur with him. A resemblance between words, or even entire phrases, in the languages of different nations or races, has no tendency to prove that those nations or races were ever identical. It only shows that they have had an intercourse with each other, through commerce, by war, or in some other way. The Romans were not descendants of the Greeks, nor the Greeks of the Romans. Yet in their languages, there were many words, and not a few phrases, very much alike. These resemblances were evidently the result, not of an original identity of race, but of an intercourse between the two nations, long after the formation of their respective languages. Romans who visited Athens, for instruction in philosophy and eloquence, contracted helenisms, and incorporated them with their native tongue. The Spanish language contains numerous words and expressions of Moorish origin. Yet the Spaniards are not, as a nation, descended from the Moors. Strike from our own language all resemblances to the Greek, Latin, and French, and only the skeleton of it will remain. Yet we are not the offspring of either of the nations, from whose languages we have drawn so abundantly in the formation of our own. Many other instances to

the same effect might be cited; but we deem the loregoing sufficient for our purpose.

It has been again inferred, that there was but one primitive language, and therefore but one primitive race of men, because all languages resemble each other in their structure and principles. This is another specimen of fallacious reasoning. All languages resemble each other, in structure and principle, not because they are dialects or branches of the same primitive tongue, but because, from the nature of the case, it must be so. Language is the representation, in articulate sounds, of things and their relations, as they appear to the human mind. But things and their relations are every where the same; and so must be a correct intellectual picture of them. There are every where objects with their properties and changes or actions. These are represented by nouns, adjectives, and verbs, which are the principal parts of speech, and belong of necessity to every language. Out of the further connexions and relations of things,

which, we repeat, are every where alike, arise the inflections of these, and also the several minor parts of speech, which must be likewise similar in principle and arrange-The resemblance which exists, then, in the structure and philosophy of all languages, arises, not from the unity of man, but from the sameness of nature, in all places, and a general similarity in the organization of the human intellect. In the representation of nature by painting, the principles are always, in all places, and necessarily, the same. It would be unsound logic, therefore, to say, that, because the people of two nations execute pictures by the same process, and on like principles, they must belong to the same original stock. Nor is it less unsound to draw such an inference respecting nations because they represent things on similar principles, by articulate In each case they copy by similar powers, and with similar means, the impressions made by nature on intellects similarly organized. Mutal resemblances, therefore,

must mark the products. Add to the foregoing, that as men are capable of uttering
but a certain number of original sounds, it
follows, of necessity, that those sounds
must frequently coincide, in the expression
of the same idea. Were the contrary of
this true, it might be pronounced miraculous. Occasional similarity in sound, therefore, and general similarity in structure, between the languages of the different races
of men, afford neither proof nor even respectable testimony, that those races are
descended from the same primitive stock.

Does any one still contend for the unity of the human race, and offer in proof of it the Mosaic account of the creation of man? If so, we would advise him to examine strictly all the writings of Moses that bear on the subject, and mark the issue. That their testimony may be valid, it ought to be concurrent. No one portion of them should either directly or virtually contradict another, or be even seemingly inconsistent

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with it. Yet such we think would be the case.

According to the Mosaic representation, as generally interpreted it was necessary, for the continuance of the human race, that Adam's sons should cohabit with their sisters. But that was incest, against which the punishment of death was afterwards proclaimed by Moses himself, at the express command of the Deity. See Levit. chap. xx. v. 17.

Shall we be told that that which was innocent at first, became criminal afterwards?

And will the mere arbitrary pleasure of
heaven be assigned as the ground of the
change? Or will it be alleged that the
intercourse was improper from the beginning; but that God could not help it, or did
not know it until he had learnt it by experience? The one exposition of the difficulty is as good as the other; and either
amounts to miserable theology. The former represents the Deity as mutable, not to

say capricious, and the two latter as uniformed and limited in his power.

Of the omniscient, all-powerful, and unchangeable Ruler of the universe we deem very differently. We believe that there is nothing unstable in his views or arbitrary in his overnment, and that nothing is unknown to him, or beyond his control. His government is one of laws which never change, because, being the product of unerring wisdom, they were perfect from the beginning. That which, according to them, was innocent at first, is innocent now; and that which is criminal now, was equally so from the dawn of creation. Things moral, like things physical, received from God a constitution which is immutable. If, then, an intercourse between the sons and daughters of the same Israelitish parents was, criminal, so must have been that between the sons and daughters of Adam and Eve. But we trust our opponents will not contend that the Deity has ever countenanced crime, much less enforced it. Yet, if their doctrine of the unity of man be correct, he did enforce it, the penalty of disobedience being the extinction of the race.

We have thus, in a discussion of much greater extent than we at first contemplated, assigned our reasons for disbelieving in the descent of the whole human race from a single pair. Relying on the united force of the arguments adduced, we feel authorized to assert, that, according to his own definition of the term, Dr. Pritchard has failed to prove, that mankind constitute but one "species." He represents the elements of species to be, "peculiarities that cannot be extinguished by any known operation of physical causes." But such peculiarities the Caucasian, Mongolian, Indian, and African races of men, have been shown to possess. As relates to those peculiarities, history and observation concur in declaring, that no "known operation of physical causes" can so far extinguish them, as to convert one race of mankind into another. We have our author's own decision, therefore,

that instead of one, there are four different species of man. For we venture to assert, that the operation of the physical causes referred to, or of any other physical causes, will as soon convert horses, asses, zebras, and quagas, into each other, as Caucasians, Mongolians, Indians, and Africans. To render the reader the more perfectly sensible of the extent of our author's failure to prove the original unity of man, we shall present him with a brief summary of his arguments on the subject. Our correctness in pronouncing them entirely analogical, will be thus established. They are as follow:

- 1. Every species of vegetables, and of the inferior animals, is the offspring of a single pair. Hence the same is true of mankind.
- 2. Among many species of inferior animals, varieties are produced by food, climate, situation, and anomalous births. Such may be also the case with man.

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3. There exists, in England, a family, the individuals of which have been marked, for three or four generations, by hard wartlike excrescences on the skin, which have procured for it the name of the "porcupine family." The members of other families have inherited, for several generations, supernumerary fingers and toes. In a few instances, a male and female, the one an African, and the other a Caucasian, have produced children perfectly black, perfectly white, or spotted with black and white. Hence, before the existence of Africans, a male and female Caucasian might have become the parents of a negro child or two, from whom has descended the African race: or the Africans being the original stock, might have given birth to white children, from whom arose the Caucasian race; or Mongolians or Indians might have thus become the progenitors of all the other races!

4. In the languages of the different tribes and nations of mankind, there are many words and phrases that resemble each other

Hence those tribes and nations belonged originally to the same stock.

Such are the arguments offered by our author, as the ground of his belief, that mankind are the descendants of a single pair. And if more inconclusive ones, not to apply to them a term less respectful, have ever been seriously urged in favour of any hypothesis, we know not where to find them. The only reason which could have induced us to notice, so extensively, the publication containing them, is, that we have heard it referred to, as a standard work, establishing beyond controversy or doubt, the hypothesis of the original unity of man. Conscientiously believing, therefore, its weight and authority to be in opposition to truth, we have attempted its refutation. Of the result of our effort, the public will judge.

Is the reader inclined to ask for our own theory of the origin of the different races of men? The call would be fair. Yet were it made, we should be obliged to re-

ply, that we have never so far methodized our thoughts on the subject, as to form any thing entitled to the name of theory. In discussing the question, our object has been to beat down the false doctrines of others, rather than to build up a substitute of our own. The rubbish of the old must be cleared away, before the foundation of the new fabric can be securely laid. Such views, however, as we entertain respecting it, are already perhaps sufficiently developed in this dissertation. In studying the natural history of man, we regard him as a member of the animal kingdom, to be judged of precisely as its other members are. The superiority of his native endowments is the only prerogative the naturalist is authorized to recognize in his favour. Of most other families of animals different species are acknowledged to exist. And we confess that, in the whole animal kingdom, we know of no family in which marks characteristic of different species, appear to us to be stronger than in that of man. By

evidence, therefore, which we know not how to resist, we are inclined to a belief in an original plurality of races, which bear to each other the relation of species. On one point we speak confidently. If, by any thing inferior to ALMIGHTY POWER, one of the present races of men has ever been converted into another, nature, since that period, has changed. There exist, at present, no physical causes competent to the effect. All efforts to prove the contrary of this will inevitably fail: they must be in their nature conjectural, if not sophistical, will consume time and occupy talents that might be more usefully employed, and had better, therefore, be abandoned as hopeless. Nothing, moreover, can ever prompt to them, but an apprehension that the christian religion will be endangered, if the hypothesis of the original unity of the human race be not established. But the apprehension is unfounded. True religion has no necessary dependence on the number of men and women that were originally created. It rests on a much firmer and holier basis: the nature of man, his connexion with his fellow men, and his relation to his God. Sentiments and actions conformable to these, constitute the essence of rational religion. On that basis let it stand, and it will stand securely. It will then be the true "rock of ages;" as little affected by the fluctuations of opinion, and the current of time, as is the eternal order of the universe, by the thousand visions which dreaming philosophers conceive in relation to it.

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