

Ethnology

TYPES OF MANKIND:

OR,

Ethnological Researches,

BASED UPON THE

ANCIENT MONUMENTS, PAINTINGS, SCULPTURES,
AND CRANIA OF RACES,

AND UPON THEIR

NATURAL, GEOGRAPHICAL, PHILOLOGICAL,
AND BIBLICAL HISTORY:

ILLUSTRATED BY SELECTIONS FROM THE INEDITED PAPERS OF

SAMUEL GEORGE MORTON, M.D.,

(LATE PRESIDENT OF THE ACADEMY OF NATURAL SCIENCES AT PHILADELPHIA.)

AND BY ADDITIONAL CONTRIBUTIONS FROM

PROF. L. AGASSIZ, LL.D.; W. USHER, M.D.; AND PROF. H. S. PATTERSON, M.D.:

BY

J. C. NOTT, M.D., AND GEO. R. GLIDDON,

MOBILE, ALABAMA,

FORMERLY U. S. CONSUL AT LONDON

—“Words are things; and a small drop of ink,
Falling, like dew upon a thought, produces
That which makes thousands, perhaps millions, think.”—BROWN

PHILADELPHIA:

LIPPINCOTT, GRAMBO & CO.

1854.

thoracic affections. He was also one of the earliest investigators of the morbid anatomy of Phthisis Pulmonalis; and his volume on that subject, although superseded by the later and more extensive researches of the French pathologists, is a monument of his industry and accuracy, and a credit to American medicine.* He also edited Mackintosh's Practice of Physic, with notes, which add materially to its value to the American physician.† In 1849, he published a text-book of anatomy, remarkable for its clearness and succinctness, and the beauty of its illustrations.‡ He was early selected by Dr. Parrish as one of his associates in teaching, and lectured upon anatomy in that connexion for a number of years. He subsequently filled the chair of anatomy in the Medical Department of Pennsylvania College from 1839 to 1843. As a lecturer he was clear, calm, and self-possessed, moving through his topic with the easy regularity of one to whom it was entirely familiar. He served for several years as one of the physicians and clinical teachers of the Alms-house Hospital, and it was there that most of his researches on consumption were made. He was a Fellow of the College of Physicians, but did not take an active part in their proceedings, from the fact that their stated meetings occurred on the same evenings as those of the Academy, where he felt it his first duty to be. His only contribution to their printed Transactions is a biographical notice of his valued friend, Dr. George McClellan, prepared by request of the College.

We now come to a portion of his scientific labors, upon which I must be allowed to dwell at greater length. I refer of course to his researches in Anthropology, commencing with what may be designated Comparative Craniology, and running on into general Ethnology. The object proposed primarily being the determination of ethnic resemblances and discrepancies by a comparison of crania, (thus perfecting what Blumenbach had left lamentably incomplete,) the work could not be commenced until the objects for comparison were brought together. The results of Blumenbach were invalidated by the small number of specimens generally relied upon by him; for in a case where allowance is to be made for individual peculiarities of form and stature, the conclusions gain infinitely in value by extension of the comparison over a sufficient series to neutralize this disturbing element. There was therefore necessary, first of all, a

* Illustrations of Pulmonary Consumption, its Anatomical Characters, Causes, Symptoms and Treatment. With twelve colored plates. Philadelphia: 1834.

† Principles of Pathology and Practice of Physic. By John Mackintosh, M. D., &c. First American from the fourth London edition. With notes and additions. In 2 vols. Philadelphia: 1835.

‡ An Illustrated System of Human Anatomy, Special, General, and Microscopic. Philadelphia: 1849.

collection of crania, and that not of a few specimens, but widely enough extended to give reliable results. The contemplation of these facts shows the magnitude and boldness of the plan, which would have sufficed to deter most men from the attempt. But Morton was not easily discouraged, and although he doubtless occupied a wider field in the end than he proposed to himself in the outset, it is evident that from the beginning he contemplated a full cabinet of universal Craniology, Human and Comparative. His own account of the commencement of the collection is as follows: "Having had occasion, in the summer of 1830, to deliver an introductory lecture to a course of Anatomy, I chose for my subject *The different forms of the skull as exhibited in the five races of men*. Strange to say, I could neither buy nor borrow a cranium of each of these races; and I finished my discourse without showing either the Mongolian or the Malay. Forcibly impressed with this great deficiency in a most important branch of science, I at once resolved to make a collection for myself."* Dr. Wood (*Memoir*, p. 13,) states that he engaged in this study soon after he commenced practice; and adds, "among the earliest recollections of my visits to his office is that of the skulls he had collected." The selection of the topic above-mentioned shows that he was already interested in it.

The increase was at first slow, but the work was persevered in with a constancy and energy that could know no failure. Every legitimate means was adopted, and every attainable influence brought to bear upon the one object. Time, labor, and money, were expended without stint. The enthusiasm he felt himself he imparted to others, and he thus enlisted a body of zealous collaborators who sought contributions for him in every part of the world. Many of them sympathized with him in his scientific ardor, and quite as many were actuated solely by a desire to serve and oblige the individual. A friend of the writer (without any particular scientific interest) exposed his life in robbing an Indian burial-place in Oregon, and carried his spoils for two weeks in his pack, in a highly unsavory condition, and when discovery would have involved danger, and probably death. Before his departure he had promised Morton to bring him some skulls, and he was resolved to do it at all hazards. This effort also involved, of course, a very extensive and laborious correspondence. He was in daily receipt of letters from all countries and from every variety of persons. It was mainly by the free contributions of these assistants that the collection eventually grew so rapidly. Among the

* Letter to J. R. Bartlett, Esq. Transactions of the American Ethnological Society, vol. ii. New York: 1848.

contributors I may mention William A. Foster, Esq., as presenting 135 specimens, Dr. J. C. Cisneros 53, and Dr. Ruschenberger 39. George R. Gliddon, Esq. presented 30, beside the 137 originally procured by his agency; William A. Gliddon, Esq., 19; M. Clot-Bey 15; and Professor Retzius 17, with 24 more received since the death of Dr. M. Over one hundred gentlemen are named in the catalogue as contributing more or less, sixty-seven of them having presented one skull each. It is not to be supposed, however, that even the portion thus given led to no outlay of means. The mere charges for freight from distant portions of the globe amounted to a considerable sum. Dr. Wood (*loc. cit.*) estimates the total cost of the collection to its proprietor from ten to fifteen thousand dollars. At this moment it is undoubtedly by far the most complete collection of crania extant. There is nothing in Europe comparable to it. I have recently seen a letter from an eminent British ethnologist, containing warm thanks for the privilege even of reading the catalogue of such a collection, and adding that he would visit it anywhere in Europe, although he cannot dare the ocean for it. At the time of Dr. Morton's death it consisted of 918 human crania, to which are to be added 51 received since, and which were then on their way. The collection also contains 278 crania of mammals, 271 of birds, and 88 of reptiles and fishes:—in all, 1656 skulls! I rejoice to state that this magnificent cabinet has been secured to our city by the contribution of liberal citizens, who have purchased it for \$4,000, and presented it to the Academy.

Mf

Simultaneously with his accumulation of crania, and based upon them, he carried on his study of Ethnology, if I may use that term in reference to a period when the science, so called at present, could scarcely be said to exist. Indeed it is almost entirely a new science within a few years. While medical men occupied themselves exclusively with the intimate structure and function of the human frame, no investigator of nature seemed to turn his attention to the curious diversities of form, feature, complexion, &c., which characterize the different varieties of men. With a very thorough anatomy and physiology, our *descriptive history* of the human species was less accurate and extensive than that of most of the well-known animals. So true was this that Buffon pithily observed that "quelque intérêt que nous ayons à nous connaître nous mêmes, je ne sais si nous ne connaissons pas mieux tout ce qui n'est pas nous." But every branch of this interesting investigation has recently received a sudden and vigorous impulse, and there has grown up within a few years an Ethnology with numerous and devoted cultivators. That it still has much to accomplish will appear from the number of questions which the pages

of this book show to be still *sub judice*. Indeed it is the widest and most attractive field open to the naturalist of to-day. To quote the admirable language of Jomard:

"Car il ne faut pas perdre de vue, maintenant que la connaissance extérieure du globe et de ses productions a fait d'immenses progrès, que la connaissance de l'homme est le but final des sciences géographiques. Une carrière non moins vaste que la première est ouverte au génie des voyages; il importe, il est urgent même, pour l'avenir de l'espèce humaine et pour le besoin de l'Europe surtout, de connaître à fond le degré de civilisation de toutes les races; de savoir exactement en quoi elles diffèrent ou se rapprochent; quelle est l'analogie ou la dissemblance entre leurs régimes, leurs mœurs, leurs religions, leurs langages, leurs arts, leurs industries, leurs constitutions physiques, afin de lier entre elles et nous des rapports plus sûrs et plus avantageux. Tel est l'objet de l'ethnologie, ce qui est la science même de la géographie vue dans son ensemble et dans toute sa haute généralité. Bien que cette matière ainsi envisagée soit presque toute nouvelle, nous ne pouvons trop, néanmoins, recommander les observations de cette espèce au zèle des voyageurs."^{*}

The attempt to establish a rule of diversity among the races of men, according to cranial conformation, commenced in the last century with Camper, the originator of the *facial angle*. The subject was next taken up by Blumenbach, who has been until recently the controlling authority upon it. His *Decades Craniorum*, whose publication was begun in 1790, and continued until 1828, covers the period when Morton began this study. His method of comparing crania, (by the *norma verticalis*,) and his distribution of races, were then both undisputed. The mind of the medical profession in Great Britain and in this country had then, moreover, been recently attracted to the subject by the publication (in 1819) of the very able book of Mr. Lawrence,[†] avowedly based upon the researches of the great Professor of Göttingen. Dr. Prichard had published his Inaugural Dissertation, *De Hominum Varietibus*, in 1808, and a translation of the same in 1812, under the title of *Researches on the Physical History of Man*, constituting the first of a series of publications, afterwards of great influence and value. Several treatises had also been published with the intention of proving that the color of the negro might arise from climatic influences, the principal work being that of President Smith, of Princeton College, New Jersey. Beyond this, nothing had been done for the science of Man up to Morton's return to this country in 1824. A new impetus had been given, however, to the speciality of Craniology by the promulgation of the views of Gall and Spurzheim, then creating their greatest excitement. These distinguished persons completed the publication of their great work at Paris in 1819, both

^{*} Etudes Géographiques et Historiques sur l'Arabie, p. 403.

[†] Lectures on Physiology, Zoology, and the Natural History of Man, delivered at the Royal College of Surgeons, by W. Lawrence, F. R. S., &c.

before and after which time Spurzheim lectured in Great Britain, making many proselytes. The phrenologists of Edinburgh must have been in the very fervor of their first love during Morton's residence there, and they included in their number some men of eminent ability and eloquence. Collections of prepared crania, of casts and masks, became common; but they were brought together in the hope of illustrating character, not race, and were prized according as fanciful hypothesis could make their protuberances correspond with the distribution of intellectual faculties in a most crude and barren psychology. Morton's collection was ethnographic in its aim from the outset; nor can I find that he ever committed himself fully to the miscalled Phrenology — a system based upon principles indisputably true, but which it holds in common with the world of science at large, while all that is peculiar to itself is already fading into oblivion.* Attractive by its easy comprehensibility and facility of application, it acquired a sudden and wide-spread popularity, and so passed out of the hands of men of science, step by step, till it has now become the property of itinerant charlatans, describing characters for twenty-five cents a head. The very name is so degraded by these associations, that we are apt to forget that, thirty years ago, it was a scientific doctrine accepted by learned and thoughtful men. There can be no doubt that it had its effect (important though indirect) upon the mind of Morton, in arousing him to the importance of the Craniology about which everybody was talking, and leading him to make that application of it, which, although neglected by his professional brethren, was still the only one of any real and permanent value.

It is evident that the published matter for Morton's studies was very limited. A pioneer himself, he had to resort to the raw material, and obtain his data at the hand of nature. Fortunately for him he resided in a country where, if literary advantages are otherwise deficient, the inducement and opportunities for anthropological research are particularly abundant. There are reasons why Ethnology should be eminently a science for American culture. Here, three of the five races, into which Blumenbach divided mankind, are brought together to determine the problem of their destiny as they best may,

* The ensuing paragraph will show more clearly Morton's matured opinion on this subject. It is from an Introductory Lecture on "The Diversities of the Human Species," delivered before the Medical Class of Pennsylvania College in November 1842.

"It (Phrenology) further teaches us that the brain is the seat of the mind, and that it is a congeries of organs, each of which performs its own separate and peculiar function. These propositions appear to me to be physiological truths; but I allude to them on this occasion merely to put you on your guard against adopting too hastily those minute details of the localities and functions of supposed organs, which have of late found so many and such zealous advocates."

while Chinese immigration to California and the proposed importation of Coolie laborers threaten to bring us into equally intimate contact with a fourth. It is manifest that our relation to and management of these people must depend, in a great measure, upon their intrinsic race-character. While the contact of the white man seems fatal to the Red American, whose tribes fade away before the onward march of the frontier-man like the snow in spring (threatening ultimate extinction), the Negro thrives under the shadow of his white master, falls readily into the position assigned him, and exists and multiplies in increased physical well-being. To the American statesman and the philanthropist, as well as to the naturalist, the study thus becomes one of exceeding interest. Extraordinary facilities for observing minor sub-divisions among the families of the white race are also presented by the resort hither of immigrants from every part of Europe. Of all these advantages Morton availed himself freely, and soon became the acknowledged master of the topic. Extending his studies beyond what one may call the zoological, into the archaeological, and, to some extent, into the philological department of Ethnography, his pre-eminence was speedily acknowledged at home, while the publication of his books elevated him to an equal distinction abroad. Professor Retzius of Stockholm, writing to him April 3d, 1847, says emphatically: "*You have done more for Ethnography than any living physiologist; and I hope you will continue to cultivate this science, which is of so great interest.*"

The first task proposed to himself by Morton, was the examination and comparison of the crania of the Indian tribes of North and South America. His special object was to ascertain the average capacity and form of these skulls, as compared among themselves and with those of the other races of men, and to determine what ethnic distinctions, if any, might be inferred from them. The result of this labor was the *Crania Americana*, published in 1839. This work contains admirably executed lithographic plates of numerous crania, of natural size, and presenting a highly creditable specimen of American art. The letter-press includes accurate measurements of the crania, especially of their interior capacity; the latter being made by a plan peculiar to the author, and enabling him to estimate with precision the relative amount of brain in various races. The introduction is particularly interesting, as containing the author's general ethnological views so far as matured up to that time. He adopts the quintuple division of Blumenbach, not as the best possible, but as sufficient for his purpose, and each of the five races he again divides into a certain number of characteristic families. His main conclusions concerning the American race are these:

- "1st. That the American race differs essentially from all others, not excepting the Mongolian; nor do the feeble analogies of language, and the more obvious ones in civil and religious institutions and the arts, denote anything beyond casual or colonial communication with the Asiatic nations; and even those analogies may perhaps be accounted for, as Humboldt has suggested, in the mere coincidence arising from similar wants and impulses in nations inhabiting similar latitudes.
- "2d. That the American nations, excepting the polar tribes, are of one race and one species, but of two great families, which resemble each other in physical, but differ in intellectual character.
- "3d. That the crania remains discovered in the mounds from Peru to Wisconsin, belong to the same race, and probably to the Toltec family."

The publication of a work of such costly character, and necessarily addressed to a very limited number of readers, was a bold undertaking for a man of restricted means. It was published by himself at the risk of considerable pecuniary loss. The original subscription list fell short of paying the expense, but I am happy to say that the subsequent sale of copies liquidated the deficit. The reception of the book by the learned was all he could have desired. Everywhere it received the warmest commendations. The following extract from a notice in the London Medico-Chirurgical Review for October 1840, will show the tone of the British scientific press:

"Dr. Morton's method and illustrations in eliciting the elements of his magnificent Craniography, are admirably concise, without being the less instructively comprehensive. His work constitutes, and will ever be highly appreciated as constituting an exquisite treasury of facts, well adapted, in all respects, to establish permanent organic principles in the natural history of man."

"Here we finish our account of Dr. Morton's American Craniology; and by its extent and copiousness, our article will show how highly we have appreciated his classical production. We have studied his views with attention, and examined his doctrines with fairness; and with perfect sincerity in rising from a task which has afforded unusual gratification, we rejoice in ranking his '*Crania Americana*' in the highest class of transatlantic literature, foreseeing distinctly that the book will ensure for its author the well-earned meed of a Caucasian reputation."

From among the warmly eulogistic letters received from distinguished *savans*, I select but one, that of Baron Humboldt, who is himself a high authority on American subjects.

"Monsieur,—Les liens intimes d'intérêt et d'affection qui m'attachent, Monsieur, depuis un demi-siècle à l'hémisphère que vous habitez et dont j'ai la vanité de me croire citoyen, ont ajouté à l'impression que m'ont fait presque à la fois votre grand ouvrage de physiologie philosophique et l'admirable histoire de la conquête du Mexique par M. William Prescott. Voilà de ces travaux qui étendent, par des moyens très différents, la sphère de nos connaissances et de nos vues, et ajoutent à la gloire nationale. Je ne puis vous exprimer assez vivement, Monsieur, la profonde reconnaissance que je vous dois. Américain bien plus que Sibérien d'après la couleur de mes opinions, je suis, à mon grand âge, singulièrement flatté de l'intérêt qu'on me conserve encore de l'autre côté de la grande vallée atlantique sur laquelle la vapeur a presque jeté un pont. Les richesses craniologiques que vous avez été assez heureux de réunir, ont trouvé en vous un digne interprète. Votre ouvrage, Monsieur, est également remarquable par la profondeur des vues anatomiques, par le détail

The desired books did not exist in any library in the United States, and Morton had already gone as far as prudence permitted. In a letter now before me, Gliddon writes him from New York in despair, stating that, for his part, he could not move a step further without access to Rosellini, (*Monumenti, &c.*) of which there was not a copy in the country. This serious difficulty was finally removed by the munificent liberality of Richard K. Haight, Esq., of New York, who, actuated solely by a generous desire to promote the interests of science, imported and placed at the disposal of our students the superb volumes in question.

Morton's study now was more than ever "a place of skulls." His correspondence, having been widely extended, was at last bearing its fruit. Contributions came dropping in from various quarters, not always accompanied with reliable information, and requiring careful deliberation before being assigned a place in his cabinet. Nothing short of positive certainty, however, would induce him to place a name upon a cranium. The ordeal of examination each had to undergo was rigid in the extreme. Accurate and repeated measurements of every part were carefully made. Where a case admitted of doubt, I have known him to keep the skull in his office for weeks, and, taking it down at every leisure moment, sit before it, and contemplate it fixedly in every position, noting every prominence and depression, estimating the extent and depth of every muscular or ligamentous attachment, until he could, as it were, build up the soft parts upon their bony substratum, and see the individual as in life. His quick artistic perception of minute resemblances or discrepancies of form and color, gave him great facilities in these pursuits. A single glance of his rapid eye was often enough to determine what, with others, would have been the subject of tedious examination. The drawings for the *Crania Egyptiaca* were made by Messrs. Richard H. and Edward M. Kern,*

* Even while I write (Dec. 1st, 1853) the news has reached us of the brutal murder by Utah Indians of Richard H. Kern, with Lieut. Gunnison, and others of the party engaged in the survey of the proposed middle route for a Pacific Railroad. So young, and so full of hope and promise! to be cut off thus, too, just as his matured intellect began to command him position, and to realize the bright anticipations of his many friends! The relations of Mr. Gliddon and myself to this new victim of savage ferocity were so intimate, that we may be excused if we pause here to give to his memory a sigh — one in which the subject of our memoir, were he still with us, would join in deepest sympathy. But the sorrow we feel is one that cannot be free from bitterness, while the bones of Dick Kern bleach unavenged upon the arid plains of Deseret. We have had too much of sentimentalism about the Red-man. It is time that cant was stopped now. Not all the cinnamon-colored vermin west of the Mississippi are worth one drop of that noble heart's-blood. The busy brain, the artist's eye, the fine taste, the hand so ready with either pen or pencil, — could these be restored to us again, they would be cheaply purchased back if it cost the extermination of every miserable Pah-Utah under heaven! He is the second member of

who were then also engaged in preparing the magnificent illustrations of Mr. Gliddon's hierological lectures; and these gentlemen have informed me that not the slightest departure from literal accuracy could escape the eye of Morton. This was true, not only of human figures, but equally of the minutest hieroglyphic details. Dr. Meigs, in his Memoir, relates an instance of his acumen, in which, while inspecting the regis in the hand of a female divinity, he noticed the resemblance to the face of a certain queen, and at once referred it to that reign; which, on examining the text, proved correct. The two following anecdotes, for which I am indebted to Mr. Gliddon, resemble the well-known instances of scientific acuteness and perspicacity that are related of Cuvier.

In the summer of 1842, Mr. G. met in New York with Mr. John L. Stephens, then recently returned from his second visit to Yucatan. The conversation turning upon crania, Mr. S. regretted the destruction of all he had collected, in consequence of their extreme brittleness. One skeleton he had hoped to save, but on unpacking it, that morning, it was found so dilapidated that he had ordered it thrown away. Mr. G. begged to see it, and secured it, comminuted as it was. Its condition may be inferred from the fact that the entire skeleton was tied up in a small India handkerchief, and carried to Philadelphia in a hat-box. It was given to Morton, who at first deplored it as a hopeless wreck. The next day, however, Mr. G. found him, with a glue-pot beside him, engaged in an effort to reconstruct the skull. A small piece of the occiput served as a basis, upon which he put together all the posterior portion of the cranium, showing it by characteristic marks to be that of an adult Indian female. From the condition of another portion of the skeleton, he derived evidence of a pathological fact of considerable moment, in view of the antiquity of these remains. How much interest he was able to extract from this handful of apparent rubbish will appear from the following passages:—

"The purport of his opinion is as follows:—In the first place, the needle did not deceive the Indian who picked it up in the grave. The bones are those of a female. Her height did not exceed five feet, three or four inches. The teeth are perfect and not appreciably worn, while the *epiphyses*, those infallible indications of the growing state, have just become consolidated, and mark the completion of adult age. The bones of the hands and feet are remarkably small and delicately proportioned, which observation applies also to the entire

his family that has met this melancholy fate. His brother, Dr. Benjamin J. Kern—a pupil of Morton, and surgeon to the ill-fated expedition of Colonel Frémont in the winter of 1848-49—was cruelly massacred by Utahs in the spring of 1849, in the mountains near Taos. So long as our government allows cases of this kind to remain without severe retribution, so long, in savage logic, will impunity in crime be considered a free license to murder at will.

skeleton. The skull was crushed into many pieces, but, by a cautious manipulation, Dr. Morton succeeded in reconstructing the posterior and lateral portions. The occiput is remarkably flat and vertical, while the lateral or parietal diameter measures no less than five inches and eight-tenths.

"A chemical examination of some fragments of the bones proves them to be almost destitute of animal matter, which, in the perfect osseous structure, constitutes about thirty-three parts in the hundred. On the upper part of the left tibia there is a swelling of the bone, called in surgical language a *node*, an inch and a half in length, and more than half an inch above the natural surface. This morbid condition may have resulted from a variety of causes, but possesses greater interest on account of its extreme infrequency among the primitive Indian population of the country."*

Mr. Gliddon, while in Paris in 1845-6, presented a copy of the *Crania Egyptiaca* to the celebrated orientalist, M. Fulgence Fresnel, (well known as the decipherer of the Himyaritic inscriptions, and now engaged in Ninevite explorations,) and endeavored to interest him in Morton's labors. More than a year afterwards, having returned to Philadelphia, he received there a box from R. K. Haight, Esq., then at Naples. The box contained a skull, but not a word of information concerning it. It was handed over to Morton, who at once perceived its dissimilarity to any in his possession. It was evidently very old, the animal matter having almost entirely disappeared. Day after day would Morton be found absorbed in its contemplation. At last he announced his conclusion. He had never seen a Phœnician skull, and he had no idea where this one came from; but it was what he conceived that a Phœnician skull should be, and it could be no other. Things remained thus until some six months afterwards, when Mr. Haight returned to America, and delivered to Mr. G. the letters and papers sent him by various persons. Among them was a slip in the hand-writing of Fresnel, containing the history of the skull in question.† He discovered it during his exploration of a *Phœnician* tomb at Malta, and had consigned it to Morton by Mr. H., whom he met at Naples. These anecdotes not only show the extraordinary acuteness of Morton, but they also prove the certainty of the anatomical marks upon which Craniologists rely.

The *Crania Egyptiaca* was published in 1844, in the shape of a contribution to the Transactions of the American Philosophical Society. This apparent delay in its appearance arose from the author's extreme caution in forming his conclusions, especially in view of the fact that he found himself compelled to differ in opinion from the majority of scholars, in regard to certain points of primary importance. Most ethnologists, with the high authority of Prichard at their

* Stephens' Yucatan, vol. i. pp. 281-2. — Morton's Catalogue of Crania, 1849, No. 1060.

† Catalogue, No. 1352.

head, ascribed the Nilotic family to the African race; while the great body of Archæologists were disposed to consider the aborigines of Egypt as (probably black) Troglodytes, from the Upper Nile, whose first halting-place and seat of civilization was at Meroë. But Morton took counsel with none of those authorities of the day. *Optimi consultores mortui*; and these dead, but still eloquent witnesses of the past, taught him clearly the identity of cranial conformation in the ancient Egyptian and the modern white man. He established, beyond question, that the prevailing type of skull must come into the Caucasian category of Blumenbach. He pointed out the distinctions between this and the neighboring Semitic and Pelasgic types. The population of Egypt being always a very mixed one, he was able also to identify among his crania those displaying the Semitic, Pelasgic, Negro and Negroid forms. Turning next to the monuments, he adduced a multitude of facts to prove the same position. His historical deductions were advanced modestly and cautiously, but most of them have been triumphantly verified. While he, in his quiet study at Philadelphia, was inferentially denying the comparative antiquity of Meroë, Lepsius was upon the spot, doing the same thing beyond the possibility of further cavil. The book was written when it was still customary to seek a foreign origin for the inhabitants of every spot on earth except Mesopotamia; and the author, therefore, indicates, rather than asserts, an Asiatic origin for the Egyptians. But his *résumé* contains propositions so important, that I must claim space for them entire, taking the liberty of calling the attention of the reader, by Italics, particularly to the last.

1. The valley of the Nile, both in Egypt and in Nubia, was originally peopled by a branch of the Caucasian race.
2. These primeval people, since called Egyptians, were the Mizraimites of Scripture, the posterity of Ham, and directly associated with the Libyan family of nations.
3. In their physical character, the Egyptians were intermediate between the modern European and Semitic races.
4. The Austral-Egyptian or Meroë communities were an Indo-Arabian stock, engrafted on the primitive Libyan inhabitants.
5. Besides these exotic sources of population, the Egyptian race was at different periods modified by the influx of the Caucasian nations of Asia and Europe—Pelasgi or Hellenes, Scythians and Phœnicians.
6. Kings of Egypt appear to have been incidentally derived from each of the above nations.
7. The Copts, in part at least, are a mixture of the Caucasian and Negro, in extremely variable proportions.
8. Negroes were numerous in Egypt. Their social position, in ancient times, was the same that it is now; that of servants or slaves.
9. The natural characteristics of all these families of man were distinctly figured on the monuments, and all of them, excepting the Scythians and Phœnicians, have been identified in the catacombs.

10. The present Fellahs are the lineal and least mixed descendants of the ancient Egyptians; and the latter are collaterally represented by the Tuaricks, Kabyles, Siwahs, and other remains of the Libyan family of nations.
11. The modern Nubians, with few exceptions, are not the descendants of the monumental Ethiopians; but a variously mixed race of Arabians and Negroes.
12. Whatever may have been the size of the cartilaginous portion of the ear, the osseous structure conforms, in every instance, to the usual relative position.
13. The teeth differ in nothing from those of other Caucasian nations.
14. The hair of the Egyptians resembles in texture that of the fairest Europeans of the present day.
15. *The physical or organic characters which distinguish the several races of men are as old as the oldest records of our species.*

The sentiments here enunciated he subsequently modified in one essential particular. In his letter to Mr. Bartlett of Dec. 1st, 1846, (published in vol. 2d of the Transactions of the American Ethnological Society, p. 215,) after reiterating his conviction that the pure Egyptian of the remotest monumental period differed as much from the negro as does the white man of to-day, he continues:—

"My later investigations have confirmed me in the opinion, that the valley of the Nile was inhabited by an indigenous race, before the invasion of the Hamitic and other Asiatic nations; and that this primeval people, who occupied the whole of Northern Africa, bore much the same relation to the Berber or Berabra tribes of Nubia, that the Saracens of the middle ages bore to their wandering and untutored, yet cognate brethren, the Bedouins of the desert."

Further details on this point will be found on pp. 231 and 232 of the present work.

The reception of this book was even more flattering than had been that of its predecessor. To admiration was added a natural feeling of surprise, that light upon this interesting subject should have come from this remote quarter. Lepsius received it on the eve of departure on his expedition to Djébel-Barkal, and his letter acknowledging it was dated from the island of Philæ. One can imagine with what intense interest such a man, so situated, must have followed the lucid deductions of the clear-headed American, writing at the other side of the world. But probably the most gratifying notice of the book is that by Prichard, in the Appendix to his Natural History of Man, of which I extract a portion. He quotes Morton largely, and always with commendation, even where the conclusions of the latter are in conflict with his own previously published opinions.

"A most interesting and really important addition has lately been made to our knowledge of the physical character of the ancient Egyptians. This has been derived from a quarter where local probabilities would least of all have induced us to have looked for it. In France, where so many scientific men have been devoted, ever since the conquest of Egypt by Napoleon, for a long time under the patronage of government, to researches into this subject; in England, possessed of the immense advantage of wealth and commercial resources; in the academies of Italy and Germany, where the arts of Egypt have been studied in national museums, scarcely anything has been done since the time of Blumen-

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back to elucidate the physical history of the ancient Egyptian race. In none of these countries have any extensive collections been formed of the materials and resources which alone can afford a secure foundation for such attempts. It is in the United States of America that a remarkable advancement of this part of physical science has been at length achieved. 'The Transactions of the American Philosophical Society' contain a memoir by Dr. Morton of Philadelphia, in which that able and zealous writer, already distinguished by his admirable researches into the physical characters of the native American races, has brought forward a great mass of new information on the ancient Egyptians." (p. 57.)

This brings us at once to the consideration of Morton's opinion upon the much-vexed question of the unity or diversity of the various races of men, or rather of their origin from a single pair; for that alone practically has been the topic of discussion. It is a subject of too much importance, both to the cause of science and the memory of Morton, to be passed over slightly. Above all, there is necessary a clear and fair statement of his opinions, in order that there may be no mistake. His mind was progressive on this subject, as upon many others. He had to disabuse himself of erroneous notions, early acquired, as well as to discover the truth. It is therefore possible so to quote him as to misrepresent his real sentiments, or to make his assertions appear contradictory and confused. I propose to show the gradual growth of his convictions by the quotation, in their legitimate series, of his published expressions on the subject.

The unity and common origin of mankind have, until recently, been considered undisputed points of doctrine. They seem to have been regarded as propositions not scientifically established, so much as taken for granted, and let alone. All men were held to be descended from the single pair mentioned in Genesis; every tribe was thought to be historically traceable to the regions about Mesopotamia; and ordinary physical influences were believed sufficient to explain the remarkable diversities of color, &c. These opinions were thought to be the teachings of Scripture not impugned by science, and were therefore almost universally acquiesced in. By Blumenbach, Prichard, and others, the unity is assumed as an axiom not disputed. It is curious that the only attack made upon this dogma, until of late, was made from a theological, and not from a scientific stand-point. The celebrated book of Peyrerius on the pre-Adamites was written to solve certain difficulties in biblical exegesis, (such as Cain's wife, the city he builded, &c.,) for the writer was a mere scholastic theologian.* He met the fate of all who ventured to defy the hierarchy, at a day when they had the civil power at their back. Now they are confined to the calling of names, as *infidel* and the like, although mischief enough

* *Præ-Adamitæ, sive exercitatio super versibus duodecimo, decimotertio et decimo quarto capitis quinti Epistolæ D. Pauli ad Romanos. Quibus inducuntur primi Homines ante Adamum conditi. Anno Salutis MDCLV.*

can they thus do, inflicting a poisoned wound. Then they had their fagots in the Place de Grève, and as they could not catch Peyrerius, the Sorbonne ordered his book publicly burned by the common hangman. There is something ludicrously pathetic in the manner in which he addresses his essay to the then-persecuted Jews, with an *utinam ex vobis unus!* and adds, "Hoc mihi certe cum vobis commune est; quod vitam duco erraticam, quæque parum convenit cum otio meditantis et scribentis." The press fairly rained replies to this daring work, from both Catholic and Protestant writers, but not one of them based on scientific grounds, nor, indeed, in the defence of Genesis. Peyrerius would appear to have confessedly the advantage there. But it was asserted that the denial of mankind's universal descent from the loins of Adam, militated with the position of the latter as "federal head" of the race in the "scheme of redemption." The writer's offence was purely theological, and hence the charge of Socinianism and the vehemence with which even a phlegmatic Dutchman could be roused to hurl at his devoted head the anathema: *Perturbet te Dominus, quia perturbasti Israel!** This excitement over, the subject was heard of no more until the French writers of the last century again agitated it. Voltaire repeatedly and mercilessly ridicules the idea of a common origin. He says—"Il n'est permis qu'à un aveugle de douter que les blancs, les Nègres, les Albinos, les Hottentots, les Lapons, les Chinois, les Américains, soient des races entièrement différentes."† But Voltaire was not scientific, and his opinion upon such questions would go for nothing with men of science. Prichard therefore sums up his *Natural History of Man*, (London, 1845,) with the final emphatic declaration "that all human races are of one species and one family." The doctrine of the unity was indeed almost universally held even by those commonly rated as "Deistical" writers. D'Hancarville, and his fellow *dilettanti*, will certainly not be suspected of any proclivity to orthodoxy; yet, in his remarks upon the wide dissemination of Phallic and other religious emblems, he gives the ensuing forcible and eloquent statement of his conviction of the full historical evidence of unity:—

"Comme les coquillages et les débris des productions de la mer, qui sont déposés sans nombre et sans mesure sur toute la surface du globe, attestent qu'à des tems inconnus à toutes les histoires, il fût occupé et recouvert par les eaux: ainsi ces emblèmes singuliers, admis dans toutes les parties de l'ancien continent, attestent qu'à des tems antérieurs à tous ceux dont parlent les historiens, toutes les nations chez laquelle existèrent ces emblèmes eurent un même culte, une même religion, une même théologie, et vraisemblablement une même langage."‡

* Non-ens Præ-Adamiticum. Sive confutatio vani et Sociniantis cujusdam Somnii, &c. Autore Antonio Hulsio. Lugd. Batav. mdcxvi. † Essai sur les Mœurs, Introd.

‡ Recherches sur l'origine, l'esprit et les progrès des arts de la Grèce, London, 1785, L. 1. xiv.

Morton was educated in youth to regard this doctrine as a scriptural verity, and he found it accepted as the first proposition in the existing Ethnology. As such he received it implicitly, and only abandoned it when compelled by the force of an irresistible conviction. What he received in sincerity, he taught in good faith. There can be no doubt that in that early course of 1830, he inculcated the unity doctrine as strongly as ever did Prichard.

But this state of opinion could not continue undisturbed. The wide ethnic diversities which so forcibly impressed one who contemplated them merely as an historian and critic (as Voltaire), could not fail to engage the attention of naturalists. The difficulties of the popular doctrine became daily more numerous and apparent, and it owed its continued existence, less to any inherent strength, than to the forbearance of those who disliked to awaken controversy by assailing it. The ordinary exposition of Genesis it was impossible for naturalists longer to accept, but they postponed to the utmost the inevitable contest. The battle had been fought upon astronomy and gained; so that *Ma pur si muove* had become the watchword of the scientific world in its conflict with the *parti prêtre*. The Geologists were even then coming victorious out of the combat concerning the six days of Creation, and the universality of the Deluge. The Archæologists were at the moment beating down the old-fashioned short chronology. Now another exciting struggle was at hand. Unfortunately it seems out of the question to discuss topics which touch upon theology without rousing bad blood. "Religious subjects," says Payne Knight, "being beyond the reach of sense or reason, are always embraced or rejected with violence or heat. Men think they *know* because they are sure they *feel*, and are firmly convinced because strongly agitated."* But disagreeable as was the prospect of controversy, it could not be avoided. It is curious to read Lawrence now, and see how he piles up the objections to his own doctrine, until you doubt whether he believes it himself! The main difficulty concerns a single centre of creation. The dispersion of mankind from such a centre, somewhere on the alluvium of the Euphrates, might be admitted as possible; but the gathering of all animated nature at Eden to be named by Adam, the distribution thence to their respective remote and diversified habitats, their reassembling by pairs and sevens in the Ark, and their second distribution from the same centre — these conceptions are what Lawrence long ago pronounced them, simply "zoologically impossible." The error arises from mistaking the local traditions of a circumscribed community for universal history. As Peyrerius remarked two centuries ago, "*peccatur non raro in lectione sacrorum*

* R. Payne Knight. Letter to Sir Jos. Banks and Sir Wm. Hamilton, p. 23.

codicum, quoties generalius accipitur, quod specialius debuit intelligi."* The most rigid criticism has demonstrated, beyond the possibility of disputation, that all the nations and tribes mentioned in the Pentateuch, are included strictly within the so-called Caucasian race, and that the writer probably never heard of (as he certainly never mentions) any other than white men. This discussion, even to the limited extent to which it has gone, has called forth much bitterness; not on the part of sincere students of the sacred text, but of that *prêtraille* which, arrogant in the direct ratio of its ignorance, substitutes clamor and denunciation for reason, and casts the dirt of opprobrious epithets when it has no arguments to offer. But already this advantage has arisen from the agitation:—that some preliminary points at least may be considered settled, and a certain amount of scholarship may be demanded of those who desire to enter the discussion; thus eliminating from it the majority of persons most ready to present themselves with noisy common-place, already ten times refuted. The men who, in the middle of the nineteenth century, can still find the ancestors of Mongolians and Americans among the sons of Japhet, or who talk about the curse of Canaan in connexion with Negroes,† are plainly without the pale of controversy, as they are beyond the reach of criticism. There is, even in some who have recently published books on the subject, such a helpless profundity of ignorance of the very first facts of the case, that one finds no fitting answer to them but—expressive silence! To endeavor to raise such to the dignity of Ethnologists, even by debate with them, is to pay them a compliment beyond their deserts. They have no right whatever to thrust themselves into the field,—the lists are opened for another class of combatants. Therefore they cannot be recognised. With Dante,

"Non ragionam di lor; ma guarda, e passa!"

It was impossible for Morton, in the prosecution of his labors, to avoid these exciting questions. We have his own assurance that he early felt the insuperable difficulties attending the hypothesis of a common origin of all races. He seems soon to have abandoned, if he ever entertained, the notion that ordinary physical influences will account for existing diversities, at least within the limits of the popular short chronology. There are two ways of escaping this difficulty—one by denying entirely the competency of physical causes to produce the effects alleged; and the other to grant them an indefinite period for their operation, as Prichard did in the end, with his "chiliads

* *Op. cit.*, p. 163.

† *The Doctrine of the Unity of the Human Race, examined on the Principles of Science*, by John Bachman, D. D. Charleston: 1850. pp. 291-292.

of years," for man's existence upon earth. Morton inclined to the other view, mainly in consequence of the historical evidence he had accumulated, showing the unalterable permanency of the characteristics of race, within the limits of human records. But he was slow to hazard the publication of an opinion upon a question of so great moment. He preferred to wait, not only until his own conviction became certainty, but until he could adduce the mass of testimony necessary to convince others. This extreme caution characterized all his literary labors, and made his conclusions always reliable.* A true disciple of the inductive philosophy, he labored long and hard in the verification of his premises. With an inexhaustible patience he accumulated fact upon fact, and published observation upon observation, often apparently dislocated and objectless, but all intended for future use. Many of his minor papers are mere stores of disjointed data. More than once, when observing his untiring labor and its long postponed result, he has brought into my mind those magnificent lines of Shelley :

Hark! the rushing snow!
The sun-awakened avalanche! whose mass,
Thrice sifted by the storm, had gathered there
Flake after flake, in heaven-defying minds
As thought by thought is piled, till some great truth
Is loosened, and the nations echo round,
Shaken to their roots, as do the mountains now.†

In fact, he had an eye, in all his investigations, to the publication at some future period of a work on the *Elements of Ethnology*, which should contain the fully ripened fruits of so many years of toil. Of this project he speaks in some of his letters as "perhaps an idle dream," but one for whose realization he would make many sacrifices. For it he reserved the complete expression of his ethnological doctrines. This consideration, and his extreme dislike of controversy, made him particularly guarded in his statements. Constitutionally averse to all noisy debate and contention, he was well aware also that they are incompatible with the calmness essential to successful scientific inquiry. Nothing but an aggravated assault could have drawn from him a reply. That assault was made, and, as I conceive, most

* In a letter of Prof. O. W. Holmes to Dr. Morton, (dated Boston, Nov. 27th, 1849,) I find the following passage, so just in its appreciation of his scientific character, that I take the liberty of quoting it:—

"The more I read on these subjects, the more I am delighted with the severe and cautious character of your own most extended researches, which, from their very nature, are permanent data for all future students of Ethnology, whose leader on this side the Atlantic, to say the least, you have so happily constituted yourself by well-directed and long-continued efforts."

† Prometheus Unbound, Act II., Scene 3d.

fortunately for his reputation. Without it, he would probably have ceased from his labors without having published any such explicit and unmistakeable expression of opinion, on this important question, as his scientific friends would have desired. As it is, he has left no room for doubt or cavil as to his position in the very front of our onward progress in Anthropology.

The first published opinion of Morton in reference to this question is found in the *Crania Americana*. It will be perceived, that, recognizing the entire incompetency of ordinary climatic and similar influences to produce the alleged effects, he suggests, as an escape from the difficulty, that the marks of Race were impressed at once by Divine Power upon the immediate family of Adam.

"The recent discoveries in Egypt give additional force to the preceding statement, inasmuch as they show, beyond all question, that the Caucasian and Negro races were as perfectly distinct in that country, upwards of three thousand years ago, as they are now; whence it is evident, that if the Caucasian was derived from the Negro, or the Negro from the Caucasian, by the action of external causes, the change must have been effected in, at most, one thousand years; a theory which the subsequent evidence of thirty centuries proves to be a physical impossibility; and we have already ventured to insist that such a commutation could be effected by nothing short of a miracle." (p. 88.)

In his printed Introductory Lecture of 1842, the same views are repeated, and the insufficiency of external causes again insisted upon. In April of the same year, he read, before the Boston Society of Natural History, a paper which was republished in 1844, under the title of *An Inquiry into the Distinctive Characteristics of the Aboriginal Race of America*. From this paper I extract the following striking passage:

In fine, our own conclusion, long ago deduced from a patient examination of the facts thus briefly and inadequately stated, is, that the American race is essentially separate and peculiar, whether we regard it in its physical, moral, or its intellectual relations. To us there are no direct or obvious links between the people of the old world and the new; for even admitting the seeming analogies to which we have alluded, these are so few in number, and evidently so casual, as not to invalidate the main position; and even should it be hereafter shown that the arts, sciences, and religion of America can be traced to an exotic source, I maintain that the organic characters of the people themselves, through all their endless ramifications of tribes and nations, prove them to belong to one and the same race, and that this race is distinct from all others." (p. 35.)

His unequivocal assertion of the permanency of the distinctive marks of Race in the final proposition of his *resumé* of the *Crania Egyptiaca* has already been given, (*supra*, p. xlii.) Two years afterwards he published this emphatic declaration:

"I can aver that sixteen years of almost daily comparisons have only confirmed me in the conclusions announced in my '*Crania Americana*,' that all the American nations, excepting the Eskimaux, are of one race, and that this race is peculiar and distinct from all others."*

* *Ethnography and Archæology of the American Aborigines*. New Haven: 1846. (p. 9.)

The next citation is from the letter to Mr. Bartlett before mentioned:

"But it is necessary to explain what is here meant by the word race. I do not use it to imply that all its divisions are derived from a single pair; on the contrary, I believe they have originated from several, perhaps even from many pairs, which were adapted, from the beginning, to the varied localities they were designed to occupy; and the Fuegians, less migratory than the cognate tribes, will serve to illustrate this idea. In other words, I regard the American nations as the true autochthones, the primeval inhabitants of this vast continent; and when I speak of their being of one race or of one origin, I allude only to their indigenous relation to each other, as shown in all these attributes of mind and body which have been so amply illustrated by modern ethnography."*

In a note to a paper in Silliman's Journal for 1847, he says:—

"I may here observe, that whenever I have ventured an opinion on this question, it has been in favor of the doctrine of *primeval diversities* among men—an original adaptation of the several races to those varied circumstances of climate and locality, which, while congenial to the one, are destructive to the other; and subsequent investigations have confirmed me in these views."†

One would suppose that whoever had read the above publications could have no doubt as to Morton's sentiments; yet Dr. Bachman and others have affected to be suddenly surprised by the utterance of opinions which had been distinctly implied, and even openly published years before. To leave no further doubt upon the subject, he thus expresses himself in his letter to Dr. Bachman of March 30th, 1850:—

"I commenced the study of Ethnology about twenty years since; and among the first aphorisms taught me by all the books to which I then had access, was this—that all mankind were derived from a single pair; and that the diversities now so remarkable, originated solely from the operations of climate, locality, food, and other physical agents. In other words, that man was created a perfect and beautiful being in the first instance, and that chance, *chance* alone has caused all the physical disparity among men, from the noblest Caucasian form to the most degraded Australian and Hottentot. I approached the subject as one of great difficulty and delicacy; and my first convictions were, that these diversities are not acquired, but have existed *ab origine*. Such is the opinion expressed in my *Crania Americana*; but at that period, (twelve years ago,) I had not investigated Scriptural Ethnology, and was content to suppose that the distinctive characteristics of the several races had been marked upon the immediate family of Adam. Further investigation, however, in connection with zoological science, has led me to take a wider view of this question, of which an outline is given above."‡

In order to present still more fully and clearly the final conclusions of our revered friend on this topic, I append two of his letters. The first is addressed to Dr. Nott, under date of January 29th, 1850.

* Transactions of American Ethnological Society, vol. ii. New York: 1848. (p. 219.)

† Hybridity in animals and plants, considered in reference to the question of the Unity of the Human Species. New Haven: 1847. (p. 4.)

‡ Letter to the Rev. John Bachman, D. D., on the question of Hybridity in animals. Charleston: 1850. (p. 15.)

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"I have read and re-read your *Two Lectures* with great pleasure and instruction. I am especially pleased with the triumphant manner in which you have treated the absurd postulate, that one race can be transmuted into another. The only illustrations that can be adduced by its advocates, as you justly observe, are certain diseased and abnormal organizations, that, by a wise law of nature, wear out in a few generations. Some of your aphorisms have delighted me. 'Man can *invent* nothing in science or religion but falsehood; and all the truths which he *discovers* are but facts or laws which have emanated from the Creator.' This is a noble sentiment admirably expressed. I am slowly preparing my memoir 'On the Size of the Brain in various Races and Families of Man; with Ethnological Remarks.' The latter clause will give me sufficient scope for the expression of my views on those sensitive points of Ethnology in which I entirely agree with you in opinion; leaving out all theological discussion, which I have carefully avoided. You will observe a note in my Essay on Hybridity, in which I avow my belief in a plurality of origins for the human species, and I have now extended those observations, and briefly illustrated them; but in so doing I find no difficulty with the text of Genesis, which is just as manageable in Ethnology as it has proved in Astronomy, Geology, and Chronology. When I took this ground four years ago, (and in the *Crania Americana* my position is the same, though more cautiously worded,) it was with some misgivings, not because I doubted the truth of my opinions, but because I feared they would lead to some controversy with the clergy. Nothing of the kind has happened; for I have avoided coming into collision with men who too often uphold a garbled text of Scripture, to defeat the progress of truth and science. I have had some letters from the clergy and from other piously-disposed persons, but the only one that had any spice of vehemence was from a friend, Dr. Bachman, of Charleston. A number of clergymen have called upon me for information on this subject, and I confess to you my surprise at the liberal tone of feeling they have expressed on this sensitive question; and I really believe that if they are not pressed too hard, they will finally concede all that can be asked of the mere question of diversity; for it can be far more readily reconciled to the Mosaic annals than some other points, Astronomy, &c., for example. As for Chronology, we all know it to be a *broken reed*. Look at the last page of Dr. Prichard's great work—the last page of his fifth and last volume—and he there gives it as his matured opinion that the human race has been 'chillads of centuries' upon the earth! He had before found it necessary to prove the Deluge a partial phenomenon, and he also admits that no physical agents could ever have produced the existing diversities among men; and ascribes them to *accidental varieties* which have been careful to intermix only among themselves, and thereby perpetuated their race! Compared with this last inadequate hypothesis, how beautiful, how evidently and inherently truthful is the proposition—that our species had its origin, not in one, but in several or in many creations; and that these diverging from their primitive centres, met and amalgamated in the progress of time, and have thus given rise to these intermediate links of organization which now connect the extremes together. Here is the truth divested of mystery; a system that explains the otherwise unintelligible phenomena so remarkably stamped on the races of men."

The remaining letter is addressed to Mr. Gliddon, under date of Philadelphia, April 27th, 1851, little more than two weeks before its author ceased to breathe. I publish it *verbatim*, so that the reader may see that the concluding emphatic declaration stands unqualified by anything in the context.

"My dear Sir:—Have you Squier's pamphlets on California and New Mexico? Is it not in them that is contained a refutation of the old fable of *white Indians* on or near the Rio Gila? If so, please send me the above paper by mail as soon as you can. I must have them somewhere, but I am in an emergency for them, and they cannot be found. I am hard at work at my chapter for Schoolcraft's book, and am desirous to get it off my hands."

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I send you a paragraph from the Ledger which will gratify you. There is no higher praise than this. It is all the better for being so aphorismally expressed. *The doctrine of the original diversity of mankind unfolds itself to me more and more with the distinctness of revelation.*

With kindest remembrances to Mrs. G. and your fine boy, I am,

“Ever faithfully yours,

“S. G. MORRIS.”

These citations are sufficient for our purpose, I apprehend, especially the laconic emphasis of the last, which may be regarded as the *ethnological testament* of our lamented friend. I have been thus full upon this point, because I believe it but justice to his memory to show that he was among the very earliest to accept and give shape to the doctrine stated. As the mountain summits are gilded with the early dawn, while the plain below still sleeps in darkness, so it is the loftiest spirit among men that first receives and reflects the radiance of the coming truth. Morton has occupied that position among us, in relation to this important advance in scientific opinion. I have desired to put the evidence of it fairly upon record, and thus to claim and secure the distinction that is justly due him.

Many well-meaning, but uninformed persons have, however, raised an outcry of horror against the assertion of original human diversities, in which they have been joined by others who ought to know better. The attack is not made upon the doctrine itself, nor upon any direct logical consequence of it. The alleged grievance consists entirely in the loss of certain corollaries deducible from the opposite proposition. Thus it is asserted that our religious system and our doctrine of social and political rights, alike result from the hypothesis of human consanguinity and common origin, and stand or fall with it. To this effect we have constantly quoted to us the high authority of Humboldt, who says, “En maintenant l'unité de l'espèce humaine, nous rejetons par conséquence nécessaire, la distinction désolante de races supérieures et de races inférieures.”*

In a note he again applies the term *désolante* to this doctrine. I have used the French translation, because it is the more forcible, and because it was that read by Morton, whose felicitous commentary upon it I am fortunately able to adduce, from a letter to Mr. Gliddon, of May 30th, 1846.

“Humboldt's word *désolante* is true in sentiment and in morals—but, as you observe, it is wholly inapplicable to the physical reality. Nothing so humbles, so crushes my spirit, as to look into a mad-house, and behold the drivelling, brutal idiocy so conspicuous in such places; it conveys a terrific idea of the disparity of human intelligences. But there is the

* *Cosmos*: traduit par H. Faye. Paris: 1846. I. p. 430. Also, note 42, p. 579. Otté translates by *depressing* in one place, and *cheerless* in another. *Cosmos*: New York, 1850. I. p. 358.

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unyielding, insuperable reality. It is *désolante* indeed to think, to know, that many of these poor mortals were born, were created so! But it appears to me to make little difference in the sentiment of the question whether they came into the world without their wits, or whether they lost them afterwards. And so, I would add, it makes little difference whether the mental inferiority of the Negro, the Samoyede, or the Indian, is natural or acquired; for, if they ever possessed equal intelligence with the Caucasian, they have lost it; and if they never had it, they had nothing to lose. One party would arraign Providence for creating them originally different, another for placing them in circumstances by which they inevitably became so. Let us search out the truth, and reconcile it afterwards."

Here are sound philosophy and plain common sense. As the facts are open to investigation, let us first examine them, and leave the inferences for future consideration. If the proposition prove true, we may safely trust all its legitimate deductions. There is no danger from the truth, neither will it conflict with any other truth. Our greater danger is from the cowardice that is afraid to look fact in the face, and, not daring to come in contact with reality, for fear of consequences, must rest content with error and half-belief. The question here is one of fact simply, and not of speculation nor of feeling. Humboldt may deny the existence of *unalterable* diversities, but that is another question, also to be settled only by a wider observation and longer experience. The ethical consequences he so eloquently deprecates, moreover, appear to me not to be fairly involved, unless he assumes that the solidarity and mutual moral relations of mankind originate solely in their relationship as descendants of a single pair. If so, he has built upon a sandy foundation, and one which every moralist of note will tell him is inadequate to the support of his superstructure. The inalienable right of man to equal liberty with his fellows depends, if it has any sanction, upon higher considerations than any mere physical fact of consanguinity, and remains the same whether the latter be proved or disproved. Ethical principles require a different order of evidence from material phenomena, and are to be regarded from another point of view. The scientific question should, therefore, be discussed on its own merits, and without reference to false issues of an exciting character, if we hope to reach the truth. I cannot forbear the conclusion that, in this matter, the Nestor of science has been betrayed into a little piece of popular declamation, unworthy of his pen, otherwise so consistently logical. But the acme of absurdity is reached by those clerical gentlemen at the south, who have been so eager to avail themselves of Humboldt's great authority in opposition to the doctrine of diversity, while they deny all his premises. Do they consider all doctrine necessarily *désolante*, because an argument in favor of slavery, true or false, may be based upon it? Humboldt does. And again, if the denial of a common paternity involves all the deplorable consequences indicated by the latter, does

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its assertion carry with it the contrary inferences? They say not. If, then, the doctrine of unity gives no essential guarantee of universal liberty and equality, why reproach the opposite doctrine with destroying what never existed? Thus, these gentlemen must stultify either themselves or their champion, while that which with him was merely a rhetorical flourish becomes, in their hands, a ridiculous *non sequitur*.

In the course of these discussions it became necessary to define, with greater precision, certain terms in constant use. This was especially the case with the word *species*, the loose employment of which occasioned much confusion. According to the prevalent zoological doctrine, the production of a prolific offspring is the highest evidence of specific identity, and *vice versa*. The important results of the application of this law to the races of men are apparent. But other authorities deny the validity of the alleged law and its application. "Wir dürften," says Rudolphi, "also wohl deswegen auf Keine Einheit des Menschengeschlechts schliessen, weil die verschiedenen Menschenstämme sich fruchtbar mit einander begatten." The question of Hybridity, therefore, presented itself to Morton in a form that demanded attention and settlement before going farther. He seized the subject, not to speculate, and still less to declaim about it, but cautiously to gather and sift its facts. His first papers were read before the Academy of Natural Sciences in November, 1846, and published in Silliman's Journal the next year. They contain a large number of facts, from various authorities, together with the author's inferences. For these, and the entire discussion of the topic, I refer the reader to Chapter XII. (on Hybridity) in this work. But the controversy into which it led Morton forms too prominent a part of his scientific history to be passed over in silence. It was not of his seeking, but was forced upon him. A literary club at Charleston, S. C., being engaged in the discussion of the Origin of Man, the Rev. Dr. Bachman assumed the championship of the unitary hypothesis, taking ground upon the evidence afforded by an invariably prolific offspring. His opponents met him with Morton's papers on Hybridity. These he must, of course, examine; but he first addressed Morton a letter, of which the following is an extract:—

Charleston, Oct. 15th, 1849.

"We are both in the search of truth. I do not think that these scientific investigations affect the scripture question either way. The Author of Revelation is also the Author of Nature, and I have no fear that when we are able to read intelligibly, we will discover that both harmonize. We can then investigate these matters without the fear of an *auto-da-fe* from men of sense. In the meantime all must go with respect and good feeling towards each other. Although hard at work in finishing the last volume of Audubon's work, I will now and then have time to look at this matter; and here let me in anticipation state some of my objections. . . . But I am overrun with calls of duty, and have written this under all kinds of interruptions. I shall be most sorry if my opposition to your theory would produce the slightest interruption to our good feeling, as I regard you, in your many works, as a benefactor to your country, and an honor to science. I feel con-

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ident that I can scatter some of your facts to the winds — yet in others you will be very apt to trip up my own heels; so let us work harmoniously together. At the English Universities they have wranglers, but no quarrellers."

This seems manly and friendly, and Morton, feeling it to be such, was very much gratified. He certainly never could have regarded it as a prelude to an attack upon himself; yet such it was. The next spring (1850), witnessed the publication of Dr. B.'s book on Unity, as well as his Monograph on Hybridity, in the Charleston Medical Journal, in both of which Morton is made the object of assault and attempted ridicule. The former work I have already referred to, (p. xlvi.) The author starts with what amounts, under the circumstances, to a broad and unequivocal confession of ignorance of his topic — a confession which, however praiseworthy on the score of frankness, may be regarded as wholly supererogatory; for no reader of ordinary intelligence can open the book without perceiving the fact for himself. His reading seems to have been singularly limited,* while the topic, involving, as it does, the characteristics of remote races, &c., demands a wide and careful consultation of authorities. For one who is confessedly neither an archæologist, an anatomist, nor a philologist, to attempt to teach Ethnology on the strength of having, many years ago, read on the subject a single work — and he scarcely recollects what — is a conception as bold as it is original. His production required no notice, of course, at the hand of Morton. On the special subject of Hybridity, however, he was entitled to an attentive hearing as a gentleman of established authority, particularly in the mammalian department of Zoology. Had he discussed it in the spirit foreshadowed by his letter, and which Morton anticipated, there would have been no controversy, but an amicable comparison of views, advancing the cause of science. But his tone was arrogant and offensive. Not only to the general reader in his book, but also to Morton in his letters,

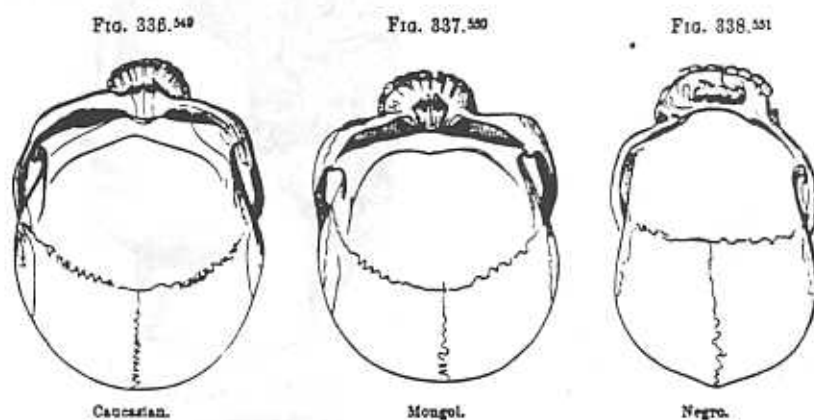
* "In preparing these notes we have even resolved not to refer to Prichard—who, we believe, is justly regarded as one of our best authorities—whose work we read with great interest some years ago, (and which is allowed even by his opponents to have been written in a spirit of great fairness,) and many of whose arguments we at the time considered unanswerable." (p. 18.)

"After this work was nearly printed, we procured Prichard's Natural History of Man—his other works we have not seen. We were aware of the conclusions at which his mind had arrived, but not of the process by which his investigations had been pursued." (p. 304.)

Now, as the Natural History was not published until 1843, it could hardly be the book read "some years ago" (prior to 1849); especially as Dr. B. confesses ignorance "of the process, &c." [*supra*.] That must have been one of the earlier volumes of the *Physical Researches*, commenced in 1812, probably the very first, which leaves the subject short of the point to which Blumenbach subsequently brought it. But Dr. B. assures us again, that other work of Prichard than the Natural History he "has never seen." Then he never saw any, before writing his own book! His memory is certainly extremely vague. It is safe to conclude, however, that he undertook to write upon this difficult subject without the direct consultation of a single authority:—the result is what might be readily anticipated.

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displacements of these last, to which aborigines in Africa have been less subjected.

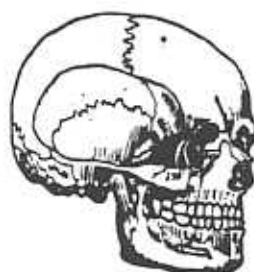


Although I do not believe in the intellectual equality of races, and can find no ground in natural or in human history for such popular credence, I belong not to those who are disposed to degrade any type of humanity to the level of the brute-creation. Nevertheless, a man must be blind not to be struck by similitudes between some of the lower races of mankind, viewed as connecting links in the animal kingdom; nor can it be rationally affirmed, that the Orang-Outan and Chimpanzee are more widely separated from certain African and Oceanic Negroes than are the latter from the Teutonic or Pelagic types. But the very accomplished anatomist of Harvard University, Dr. Jeffries Wyman, has placed this question in its true light:—

"The organization of the anthropoid quadrumana justifies the naturalist in placing them at the head of the brute-creation, and placing them in a position in which they, of all the animal series, shall be nearest to man. Any anatomist, however, who will take the trouble to compare the skeletons of the Negro and Orang, cannot fail to be struck at sight with the wide gap which separates them. The difference between the cranium, the pelvis, and the conformation of the upper extremities, in the Negro and Caucasian, sinks into insignificance when compared with the vast difference which exists between the conformation of the same parts in the Negro and the Orang. Yet it cannot be denied, however wide the separation, that the Negro and Orang do afford the points where man and the brute, when the totality of their organization is considered, most nearly approach each other." 523

The truth of these observations becomes popularly apparent through the following comparative series of likenesses. There are fourteen of them; and, by reference to the works whence they are chosen, the reader can verify the fidelity of the major portion. For the remainder, taken from living nature, the authors are responsible when vouching for their accuracy.

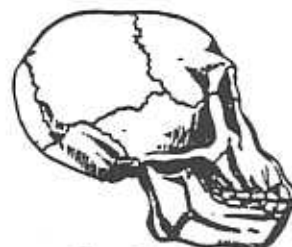
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FIG. 339. — Apollo Belvidere.³³³FIG. 340.³³⁸

Greek.

FIG. 341. — Negro.³³⁴FIG. 342.³³⁷

Creole Negro.

FIG. 343. — Young Chimpanzee.³³⁵FIG. 344.³³⁶

Young Chimpanzee.



Orang-Outan.



Hottentot Wagoner — Caffre War.



Chimpanzee.



Hottentot from Somerset.



Mobile Negro, 1853.



Mobile Negro, 1853.



Negro, 2200 years old (supra, pp. 250-251).



Nubian, 2200 years old.

(459)

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It will doubtless be objected by some that extreme examples are here selected; and this is candidly admitted: yet, each animal type has a centre around which it fluctuates—and such a head as the Greek is never seen on a Negro, nor such a head as that of the Negro on a Greek. Absolute uniformity of type is not a law of Nature in any department: in the gradations of species, extremes meet, and are often confounded.

Morton's manuscripts supply an extract which shows, that "skeptical physicians" are not the only honest men who cannot descry unity of human origins in Nature's phenomena:—

"We fully concur with a learned and eloquent divine (the Hon. and Rev. William Herbert), that we possess no information concerning the origin of the different races of mankind, 'which are as different in appearance as the species of vegetables.' No one of these races has sprung up within the period of historical certainty; nor are we any better informed in respect to their 'innumerable languages, which cannot be reunited; and no person can show how or when any one of them arose, although we may trace the minglings of one with another in the later years of the world.'" 383

INTELLECT.

I had intended to publish an entire chapter on the "Comparative Mental Characters of Races;" but our Part I. has already swelled beyond its prescribed limits; and, in consequence, although this field is a broad and fertile one, I must be content with a few brief remarks. It has been admirably observed by Dr. Robert Knox, that

"Human history cannot be a mere chapter of accidents. The fate of nations cannot be always regulated by chance; its literature, science, art, wealth, religion, language, laws and morals cannot surely be the result of mere accidental circumstances." 384

It is the primitive organization of races, their mental *instincts*, which determine their characters and destinies, and not blind hazard. All history, as well as anatomy and physiology, prove this.

Reason has been called the "proud prerogative of man"—being the faculty which disunites him from the brute creation. Metaphysicians propose many definitions of *instinct* and of *reason*; and learned tomes have been written to show wherein the one differs from the other: and yet no true mental philosopher will contend that the line of demarcation can be drawn, nor can he point out where animal intellect ends and that of man begins. Even Prichard admits that animals do *reason*, and I might quote observations of the ablest naturalists to support him; but the following *résumé* suffices.

To judge the true nature of a "species" of animals, it must be viewed in its natural state; that is, unchanged either by domestication, or through foreign influences. To judge a "type" of the human family, it must also be studied separately; unadulterated in blood, and in the natural condition in which its instincts and energies have placed it. Our domestic animals, influenced by artificial causes, now differ exceedingly in *physique* and in

morale from their primitive wild progenitors. The races of men are governed by similar laws. Intelligence, activity, ambition, progression, high anatomical development, characterize some races; stupidity, indolence, immobility, savagism, low anatomical development distinguish others. Lofty civilization, in all cases, has been achieved solely by the "Caucasian" group. Mongolian races, save in the Chinese family, in no instance have reached beyond the degree of semi-civilization; while the Black races of Africa and Oceanica, no less than the *Barbarous* tribes of America, have remained in utter darkness for thousands of years. Negro races, when domesticated, are susceptible of a limited degree of improvement; but when released from restraint, as in Hayti, they sooner or later relapse into barbarism.

Furthermore, certain savage types can neither be civilized nor domesticated. The *Barbarous* races of America (excluding the Toltecs), although nearly as low in intellect as the Negro races, are essentially untameable. Not merely have all attempts to civilize them failed, but also every endeavor to enslave them. Our Indian tribes submit to extermination, rather than wear the yoke under which our Negro slaves fatten and multiply.

It has been falsely asserted, that the *Choctaw* and *Cherokee* Indians have made great progress in civilization. I assert positively, after most ample investigation of the facts, that the pure-blooded Indians are everywhere unchanged in their habits. Many white persons, settling among the above tribes, have intermarried with them; and all such trumpeted progress exists among these whites and their mixed breeds alone. The pure-blooded savage still skulks untamed through the forest, or gallops athwart the prairie. Can any one call the name of a single pure Indian of the *Barbarous* tribes who — except in death, like a wild cat — has done anything worthy of remembrance?

SEQUOYAH, *alias* George Guess, the "Cherokee Cadmus," so renowned for the invention of an alphabet, was a half-breed, owing his inventive genius to his Scotch father. My information respecting these Cherokee tribes has been obtained from such men as Governor Butler, Major Hitchcock, Colonel Bliss, and other distinguished officers of our army — all perfectly conversant with these hybrid nations.

While, on the one hand, it must be admitted, that animals possess a limited degree of *reason*, it is equally true, on the other, that the races of men also have their *instincts*. They reason, but this "reason," as we term it, is often propelled by a blind internal force, which cannot be controlled. Groups of mankind, as we have abundantly seen, differ in their cranial developments; and their *instincts* drive them into lines diverging from each other — giving to each one its typical or national character.

The Egyptians, the Assyrians, the Jews, the Greeks, the Romans, the Celts, the Chinese, or the Hindoos, have not been solely guided by simple *reason*. Each type possessed, at the start, mental instinct, which, driving reason before it, determined each national character. The earliest civilization known to us is that of Egypt; and from this foundation, it is commonly said, all more modern civilizations are derived. Of this, science is by no means certain. From Egypt, the stream is supposed to have flowed steadily on, through Assyria, Palestine, Tyre, Persia, Greece, Rome, Gaul, Germany, Spain, Britain, until it crossed the Atlantic to our Federal Union. Certain it is, that Western Europe has rifted the bonds of barbarism only within recent historical times. European races, notwithstanding, possessed those cranial developments, and those moral instincts, which forced them to play their parts in the grand drama, as soon as the light penetrated to them, and that forms of government and stability became secured. The Celtic and the Germanic races required no

gradual "expansion of brain," through successive educated generations. Created with the fullest "expansion," they only awaited opportunity to practise it. But, what has been the history of the dark races? When the stream originating in old Oriental civilization bounded across the Atlantic, instead of emulously drinking of its glorious waters, the aborigines of America have succumbed beneath its eddy, as though it exhaled an epidemic pestilence.

The Black-African races inhabiting the South of Egypt have been in constant intercourse with her, as we prove from the monuments, during 4000 years; and yet they have not made a solitary step towards civilization—neither will they, nor can they, until their physical organization becomes changed. With our verbal reservations about the term "Caucasian," [*supra*, p. 247,] the following paragraph, from the trenchant pen of THEODORE PARKER, speaks incontestable truths:—

"The Caucasian differs from all other races: he is humane, he is civilized, and progresses. He conquers with his head, as well as with his hand. It is intellect, after all, that conquers—not the strength of a man's arm. The Caucasian has been often master of the other races—never their slave. He has carried his religion to other races, but never taken theirs. In history, all religions are of Caucasian origin. All the great limited forms of monarchies are Caucasian. Republics are Caucasian. All the great sciences are of Caucasian origin; all inventions are Caucasian; literature and romance come of the same stock; all the great poets are of Caucasian origin; Moses, Luther, Jesus Christ, Zoroaster, Budha, Pythagoras, were Caucasian. No other race can bring up to memory such celebrated names as the Caucasian race. The Chinese philosopher, Confucius, is an exception to the rule. To the Caucasian race belong the Arabian, Persian, Hebrew, Egyptian; and all the European nations are descendants of the Caucasian race."

It is vehemently maintained, that mankind must be of common origin, because all men are endowed with more or less of reason, with some moral sense, and are impressed with the idea of responsibility to a Supreme Being; but the very statement of such proposition carries with it the conviction that it is simply an hypothesis, unsupported by facts. No line can be drawn between men and animals on the ground of "reason," and more than one of the savage races of men possess no perceptible moral or religious ideas.

If the Bible had been so construed as to teach that there were, from the beginning, many primitive races of men, instead of one, the psychological grades would doubtless have been regarded by everybody as presenting the plainest analogies when compared with the species of inferior animals. It would have been allowed at once, that beings so distinct in physical characters should naturally present diversity of mental and moral traits. All the species of *equidæ* exhibit certain habits and instincts in common, whilst differing in others. Amongst carnivora, the felines—such as lions, tigers, panthers, leopards, lynxes, cats—present a unity of moral and intellectual character, so to say, quite as striking as that displayed by the human family; and, scientifically speaking, there is just as much ground, at this point of view, for saying that all the felines are of one "species," as all the various types of mankind.

Nor can any valid argument be drawn from credence in a God, or in a future state. There exists among human races not the slightest unity of thought on these recondite points. Some believe in one God: the greater number in many: some in a future state, whilst others have no idea of a Deity, nor of the life hereafter. Many of the African, and

all of the Oceanic Negroes, as missionaries loudly proclaim, possess only the crudest and most grovelling superstitions. Such tribes entertain merely a confused notion of "good spirits," whose benevolence relieves the savage from any fatiguing illustration of his gratitude; and an intense dread of "bad spirits," whom he spares no clumsy sacrifice to propitiate. Did space permit, I could produce historical testimonies by the dozen, to overthrow that postulate which claims for sundry inferior types of men any inherent recognition of *Divine Providence* — an idea too exalted for their cerebral organizations: and which is fondly attributed to them by untravelled or unlettered "Caucasians;" whose kind-hearted simplicity has not realized that diverse lower races of humanity actually exist uninvested by the Almighty with mental faculties adequate to the perception of religious sentiments, or abstract philosophies, that in themselves are exclusively "Caucasian."

Men and animals are naturally imbued with an instinctive fear of death; and it is perhaps more universal and more intense in the latter than the former. Man not only shudders instinctively at the idea of the grave, but his mind, developed by culture, carries him a step further. He shrinks from total annihilation, and longs and hopes for, and believes in, another existence. This conception of a future existence is modified by race and through education. Like the pre-Celts of ancient Europe, the Indian is still buried with his stone-headed arrows, his rude amulets, his dog, &c., equipped all ready for Elysian hunting-fields; at the same time that many a white man imagines a heaven where he shall have nothing to do but sing Dr. Watts' hymns around the Eternal throne.

It matters not from whatever point we may choose to view the argument, unity of races cannot be logically based upon psychological grounds. It is itself a pure hypothesis, which one day will cease to attract the criticism of science.

In a Review by GEO. COMBE of Morton's *Crania Americana*,⁵⁶⁵ may be found a most interesting comparison of the brains of American aborigines with the European. Comparisons of any two well-marked types would yield results quite as striking. A few extracts are all we can afford from an article that, commanding the respect, will excite the interest of the reader.

"No adequately-instructed naturalist doubts that the brain is the organ of the mind. But there are two questions, on which great difference of opinion continues to prevail: — 1. Whether the size of the brain (health, age and constitution being equal,) has any, and if so, what influence, on the power of mental manifestations? 2. Whether different faculties are, or are not, manifested by particular portions of the brain."

I believe that all scientific men concede that brains below a certain size are always indicative of idiocy, and that men of distinguished mental faculties have large heads.

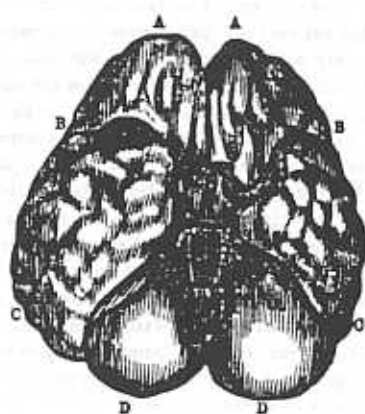
"One of the most singular features in the history of this continent is, that the aboriginal races, with few exceptions, have perished, or constantly receded, before the Anglo-Saxon race; and have in no instance [not even Cherokee] either mingled with them as equals, or adopted their manners and civilization."

"Certain parts of the brain, in all classes of animals [says Cuvier⁵⁶⁶] are large or small, according to certain qualities of the animals."

"If then there be reason to believe that different parts of the brain manifest different mental faculties, and if the size of the part influence the power of manifestation, the necessity is very evident of taking into consideration the *relative proportions of different parts of the brain*, in a physiological inquiry into the connection between the crania of nations and their mental faculties. To illustrate this position, we present exact drawings of two casts from nature; one (Fig. 353) is the brain of an American Indian; and the other (Fig. 354) the brain of an European. Both casts bear evidence of compression or flattening

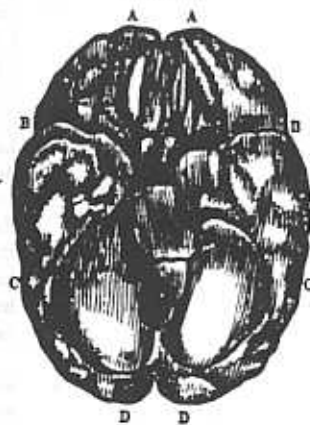
out, to some extent, by the pressure of the plaster; but the European brain is the flatter of the two. We have a cast of the entire head of this American Indian, and it corresponds closely with the form of the brain here represented. It is obvious that the absolute size of the brain (although probably a few ounces less in the American) *might* be the same in both; and yet, if different portions manifest different mental powers, the characters of the individuals, and of the nations to which they belonged (assuming them to be types of the races), might be exceedingly different. In the American Indian, the anterior lobe, lying between

FIG. 353.



American Indian.

FIG. 354.



European.

A A and B B, is small, and in the European it is large, in proportion to the middle lobe, lying between B B and C C. In the American Indian, the posterior lobe, lying between C and D, is much smaller than in the European. In the American, the cerebral convolutions on the anterior lobe and upper surface of the brain, are smaller than in the European.

"If the anterior lobe manifest the intellectual faculties—the middle lobe, the propensities common to man with the lower animals—and the posterior lobe, the domestic and social affections—and if size influence the power of manifestation, the result will be, that in the native American, intellect will be feeble—in the European, strong; in the American, animal propensity will be very great—in the European, more moderate; while, in the American, the domestic and social affections will be feeble, and, in the European, powerful. We do not state these as established results; we use the cuts only to illustrate the fact that the native American and European brains *differ widely in the proportions of their different parts*; and the conclusion seems natural, that if different functions be attached to different parts, no investigation can deserve attention which does not embrace the size of the different regions, in so far as it can be ascertained."

Prof. Tiedemann admits that "there is, undoubtedly, a very close connection between the *absolute size* of the brain and the intellectual powers and functions of the mind;" asserting also that the Negro races possess brain as large as Europeans: but, while he overlooked entirely the comparative size of parts, Morton has refuted him on the equality in absolute size.

The above comparison of two human brains illustrates anatomical divergences between European and American races. Could a complete series of engravings, embracing specimens from each type of mankind, be submitted to the reader, his eye, seizing instantaneously

the cerebral distinctions between Peruvians and Australians, Mongols and Hottentots, would compel him to admit that the physical difference of human races is as obvious in their internal brains as in their external features.

Let us here pause, and inquire what landmarks have been placed along the track of our journey. The reader who has travelled with us thus far will not, I think, deny that, from the facts now accessible, the following must be legitimate deductions:—

1. *That the surface of our globe is naturally divided into several zoological provinces, each of which is a distinct centre of creation, possessing a peculiar fauna and flora; and that every species of animal and plant was originally assigned to its appropriate province.*
2. *That the human family offers no exception to this general law, but fully conforms to it: Mankind being divided into several groups of Races, each of which constitutes a primitive element in the fauna of its peculiar province.*
3. *That history affords no evidence of the transformation of one Type into another, nor of the origination of a new and PERMANENT Type.*
4. *That certain Types have been PERMANENT through all recorded time, and despite the most opposite moral and physical influences.*
5. *That PERMANENCE of Type is accepted by science as the surest test of SPECIFIC character.*
6. *That certain Types have existed (the same as now) in and around the Valley of the Nile, from ages anterior to 3500 years B. C., and consequently long prior to any alphabetic chronicles, sacred or profane.*
7. *That the ancient Egyptians had already classified Mankind, as known to them, into FOUR RACES, previously to any date assignable to Moses.*
8. *That high antiquity for distinct Races is amply sustained by linguistic researches, by psychological history, and by anatomical characteristics.*
9. *That the primeval existence of Man, in widely separate portions of the globe, is proven by the discovery of his osseous and industrial remains in alluvial deposits and in diluvial drifts; and more especially of his fossil bones, imbedded in various rocky strata along with the vestiges of extinct species of animals.*
10. *That PROLIFICACY of distinct species, inter se, is now proved to be no test of COMMON ORIGIN.*
11. *That those Races of men most separated in physical organization—such as the BLACKS and the WHITES—do not amalgamate perfectly, but obey the Laws of Hybridity. Hence*
12. *It follows, as a corollary, that there exists a GENUS HOMO, embracing many primordial Types or "Species."*

Here terminates Part I. of this volume, and with it the joint responsibilities of its authors. It remains for my colleague, Mr. Gliddon, to show what light has been thrown by Oriental researches upon those parts of Scripture that bear upon the "Origin of Mankind."

J. C. N.