

# MEMOIRS

READ BEFORE THE

## ANTHROPOLOGICAL SOCIETY OF LONDON.

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I.—*On the Negro's Place in Nature.*\* By JAMES HUNT, PH.D., F.S.A., F.R.S.L., F.A.S.L., Foreign Associate of the Anthropological Society of Paris, Honorary Fellow of the Ethnological Society of London, Corresponding Member of the Upper Hesse Society for Natural and Medical Science, etc., etc., and President of the Anthropological Society of London.

I propose in this communication to discuss the physical and mental characters of the Negro, with a view of determining not only his position in animated nature, but also the station to be assigned to him in the genus *homo*. I shall necessarily have to go over a wide field, and cannot hope to treat the subject in an exhaustive manner. I shall be amply satisfied if I succeed in directing the attention of my scientific friends to a study of this most important and hitherto nearly neglected branch of the great science of Anthropology.

It is not a little remarkable that the subject I propose to bring before you this evening is one which has never been discussed before a scientific audience in this Metropolis. In France, in America, and in Germany, the physical and mental characters of the Negro have been frequently discussed, and England alone has neglected to pay that attention to the question which its importance demands. I shall, therefore, make no apology for bringing this subject in its entirety under your consideration, although I should have preferred discussing each point in detail. I hope, however, this evening to bring before you facts and opinions that will lay a good foundation for future inquiry and discussion. Although I shall

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\* Read Nov. 17, 1863.

dwell chiefly on the physical, mental, and moral characters of the Negro, I shall, at the same time, not hesitate to make such practical deductions as appear to be warranted from the facts we now have at hand, and trust that a fair and open discussion of this subject may eventually be the means of removing much of the misconception which appears to prevail on this subject both in the minds of the public, and too frequently in the minds of scientific men. While, however, I shall honestly and without reservation state the conclusions at which I have arrived, I shall at the same time listen with deep attention and respect to those who differ from me, and who support their opinions by facts, by the opinions of some travellers, or by their own observations. Heretofore, however, it has happened that much human passion has been introduced, not only into public discussions, but especially into the literature on this subject. Even such a generally fair and philosophic writer as Professor Waitz has accused men of science with promulgating views which are practically in favour of the so-called "slavery" of the Confederate States of America. Many other scientific men could be named who have equally been guilty of imputing such unfair and uncharitable motives. While, on the other hand, writers thus accused retort by applying to their opponents all sorts of epithets. One author, for instance, exclaims: "How I loathe that hypocrisy which claims the same mental, moral, and physical equality for the Negro which the whites possess."\* No good can come of discussion conducted in such a spirit. If we wish to discover what is the truth, we must give each other credit for honesty, and not impute base or interested motives.

In the first place, I would explain that I understand by Negro, the dark, woolly-headed African found in the neighbourhood of the Congo river. Africa contains, like every other continent, a large number of different races, and these have become very much mixed. These races may be estimated as a whole at about 150 millions, occupying a territory of between 13 and 14 millions of square miles. I shall not enter into any disquisition as to the great diversity of physical conformation

\* *Negro Mania*: being an examination of the falsely assumed equality of the various races of man; by John Campbell, Philadelphia, 1851, p. 11.

that is found in different races, but shall simply say that my remarks will be confined to the typical woolly-headed Negro. Not only is there a large amount of mixed blood in Africa, but there are also apparently races of very different physical characters, and in as far as they approach the typical Negro, so far will my remarks apply to them. But I shall exclude entirely from consideration all those who have European, Asiatic, Moorish or Berber blood in their veins.

My object is to attempt to determine the position which one well-defined race occupies in the genus homo, and the relation or analogy which the negro race bears to animated nature generally. We have recently heard discussions respecting Man's place in nature: but it seems to me that we err in grouping all the different races of Man under one generic name, and then compare them with the anthropoid Apes. If we wish to make any advance in discussing such a subject, we must not speak of man generally, but must select one race or species, and draw our comparison in this manner. I shall adopt this plan in comparing the Negro with the European, as represented by the German, Frenchman, or Englishman. Our object is not to support some foregone conclusion, but to endeavour to ascertain what is the truth, by a careful and conscientious examination and discussion of the facts before us. In any conclusion I may draw respecting the Negro's character, no decided opinion will be implied as to the vexed question of man's origin. If the negro could be proved to be a distinct species from the European, it would not follow that they had not the same origin—it would only render their identity of origin less likely. I shall, also, have to dwell much on the analogies existing between the Negro and the Anthropoid Apes; but these analogies do not necessarily involve relationship. The Negro race, in some of its characters, is the lowest of existing races, while in others it approaches the highest type of European: and this is the case with other savage races. We find the same thing in the Anthropoid Apes, where some species resemble man in one character, and some in another.

The father of English Ethnology, Dr. Prichard, thought that the original pair must have been Negroes, and that mankind

descended from them. His words are:—"It must be concluded that the process of nature in the human species is the transmutation of the characters of the Negro into those of the European, or the evolution of white varieties in black races of men. We have seen that there are causes existing which are capable of producing such an alteration, but we have no facts which induce us to suppose that the reverse of this change could in any circumstance be effected. This leads us to the inference that the primitive stock of men were Negroes, which has every appearance of truth." It is not a little remarkable that although Blumenbach and Prichard were both advocates for the unity of man, they materially differed in their argumentation. Blumenbach saw, in his five varieties of man, nothing but degeneracy from some ideal perfect type. Prichard, on the contrary, asserted he could imagine no arguments, or knew of no facts, to support such a conclusion. Prichard, however, was not alone in this supposition; for Pallas,† Lacedæde,‡ Hunter,§ Doornik,|| and Link,¶ were also inclined to the same view. We must not dwell on such speculations; for on the present occasion we shall not touch on the origin of man: it will be enough if we assist in removing some of the misconceptions regarding the Negro-race existing in the minds of some men of science. It is too generally taught that the Negro only differs from the European in the colour of his skin and the peculiarity of his hair. The skin and hair are, however, by no means the only characters which distinguish the Negro from the European, even physically; whilst the mental and moral difference is still greater than the demon-

\* *Researches into the Physical History of Mankind*, 1813, p. 238.

† *Travels through the Southern Provinces of the Russian Empire*, in 1783-4.

‡ *Vue Générale*, etc. Paris, 1822.

§ *Disputatio inauguralis de Hominum Varietibus et eorum causis ægropens*, et c. Joannes Hunter, Edinburgh, 1775.

|| *Physogeny-naturverbindung Ouderoock*, etc. Amst., 1808.

¶ On this point Link (*Die Urvwelt*, etc., Berlin, 1821-2) says:—"Seemingly's investigations (Die Körperliche Verschiedenheit des Negers, Frankfurt, 1785), show how much more the Negro in his internal structure resembles the Ape than the European. The latest productions of the animal world were mammals, and it stands to reason that the most recent race should be that which is the most remote from the other mammals, and that race should be the oldest which approaches them most, namely, the Negro. Colour, also, confirms this everywhere, when we observe white and black animals of the same species. The latter always form the original stock, the former the deviation."

strated physical difference. In the first place, what are the physical distinctions between the Negro and the European? The average height of the Negro\* is less than that of the

\* "The stature of the Negro approaches the middle size. The tribes above the middle stature are probably more numerous than those below it. I know of no instances of dwarfism among Negroes, though the monuments of Egypt show that there were dwarfs among the Negroes at a very remote epoch. Nevertheless, giants and dwarfs occupy a certain place in the ideas and stories of the Negro, as well as failed men. We know what to believe as regards the latter point. With respect to dwarfs, the Boesjemen seem to answer the ideas of the Negroes, for they play in their stories the same part as the Hyperboreans in the traditions of ancient Greece. Obesity is exceptionally found in males of high rank, and more frequently in the women. The disposition to grow fat is less rare among the short than among the tall Negroes. The taller are frequently lank and very angular.

"On examining the physiognomy of the Negro, I would first observe that the palpebral fissure is narrow and horizontal; but the aperture of the nostrils presents instead of a raised triangle a transverse ellipsis; that the point of the nose is obtuse, round, and thick; that the ear is small, detached from the head, with a lobule little separated. To this must be added the cheeks stuffed by the masseters, the conformation of the jaws and lips, and the ensemble of the physiognomy of the Negro presents a singular mixture. The inferior part reflects sensuality, not to say more; above the mouth we might say it is the face of a new-born child enlarged. The absence of expression in the features produces the effect of an unfinished work. The change of colour, so significant in the white man, that nut-brownage, but more effective than the spoken word which moves us, is almost entirely absent in our African brothers. The black veil which covers the whole, even withdraws the play of the muscles from the eye of the observer, unless it be in moments of passionate agitation.

"The eye alone enables us to judge what passes in the depth of the mind. This mirror is sufficiently bright to enable us to distinguish two classes, which may be compared to the choleric and phlegmatic temperaments. The travellers who have observed the Negro in his native country indicate some expressive, and, so to say, national shades, which distinguish the peoples of the Sudan. This is in harmony with the differences in features, stature, we shall speak of in the sequel. We find thus among the authors the terms, "dignified and proud, jovial and gay, intelligent and cunning;" also, "insignificant and inexpressive, melancholy and morose, dull and stupid." Thus the Negro participates also in this respect largely of the nature of man in general; but it cannot be said of him that was applied to the American, "gentleness hovers on his lips, and ferocity gushes from his eyes."

"The neck of the Negro is generally short; it is scarcely 8 to 9 centimetres, excepting very tall subjects, when it attains 10 centimetres; the prominence of the larynx is rounded; the shoulders are less powerful than in the Turanian or African. The Negro prefers carrying his burden on the head. The Negro is shrunk in the flank, the abdomen frequently relaxed; the umbilicus, situated near the pubis than in the European, is slightly prominent.

"After these short remarks on the conformation of the trunk, we must fix our attention on the limbs. We have already indicated the proportion of the parts which compose them. It now remains to describe their particular form. The arm and the forearm of the Negro present neither the muscular contours of the European nor the rounded shape of the American. The palm of the hand, as well as the sole of the foot, are always of a bistre colour. The palm is narrow and flattened; that is to say, the thumb and hypothenar eminences, as well as the tactile cushions, are little developed. The folds of the palm are very simple and rudimentary. The fingers are elongated; of little thickness at the ends; the nails are flat, bistre coloured, and rather widened at the end.

European, and although there are occasionally exceptions, the skeleton of the Negro is generally heavier, and the bones larger and thicker in proportion to the muscles than those of the European. The bones are also whiter, from the greater abundance of calcareous salts. The thorax is generally laterally compressed, and, in thin individuals, presents a cylindrical form, and is smaller in proportion to the extremities. The extremities of the Negro differ from other races more by proportion than by form: the arm usually reaches below the middle of the femur. The leg is on the whole longer, but is made to look short on account of the ankle being only between 1½ in. to 1¼ in. above the ground; this character is often seen in mulattoes. The foot is flat, and the heel is both flat and long. Burmeister has pointed out the

"In the inferior limb we observe the fold of the buttocks less rounded, the thighs more angular in front and specially at the back; the knees approximated; the calf usually weak, short, and laterally compressed; the feet spread out; the heel wide and prominent; the lateral borders of the feet straight, their anterior portion widened; the great toes short and small. The foot is rarely highly arched; on the other hand it is elongated, and what it wants in height is made up by the tibia, which is longer in proportion.

"This conformation of the foot of the Negro has induced a learned naturalist to take the foot as the starting point to fix the type of races. But the particulars given by M. Simonot, on the diversities met with in this respect among the peoples of the Senegal, which accord with the reports of other travellers and my own observations, throw doubt upon the consistency of the conformation. On the other hand, it is certain that the type of the inferior limb, as I have described it, is the appanage of the majority of Negroes. The flat foot is, however, also met with in a large number of races approaching more the Aryan than the Negro; for instance, in some tribes of America and Polynesia. It is also frequent in Russia, and it frequently influences the reform of the military service in the rest of Europe. The shortening of the great toe, combined with a slight distance from the rest, has been noted in the Negro, in some races of Malasia, and the Hoffentof as a constant character approaching these peoples to the ape. The importance of the great toe is in descending the animal series. I think it therefore necessary well to examine this point as regards the Negro. Now it is true that the great toe in the Negro rarely rises above the second, but neither is it often shorter. This applies also to the pretended lateral distance which may moreover be owing to the employment of thongs in their shoes, as done by the Arabs, for instance. It is clear that all that has been asserted relative to the opposition of the great toe of the Negro is reduced to the simple question: Is there a muscle, or at least an aponeurotic tendon, subservient to this pretended use? No, where, and never has anything like it been discovered in the human genus. But a slight shortening of the great toe undoubtedly exists, not merely among the Negro tribes, but also in ancient and modern Egyptians, and even in some of the most beautiful types of Caucasian females I have seen. This character is not merely constant in the ancient Egyptian statues, it is also seen where art has fixed the characters of the ideal man, namely, in the sculptures of Greece. I am, however, as far from wishing to establish the identity of the foot of the Negro with that ideal type, as I am to class the inhabitants of Alsace among the Negroes, because many of them present the same peculiarity. (Pruner Bey. *Memoire sur les Negres*, 1861.)

resemblance of the foot and the position of the toes of the Negro to those of the ape. The toes are small, the first separated from the second by a free space.\* Many observers have noticed the fact that the Negro frequently uses the great toe as a thumb. The knees are rather bent, the calves are little developed and the upper part of the thigh rather thin. The upper thigh-bone of the Negro has not so decided a resemblance to that of the ape as that of the bushman.† He rarely stands quite upright, his short neck and large development of the cervical muscles give great strength to the neck. The shoulders, arms,

\* "In most of the Africans the heel projects. From the skin of their feet being often of a horny hardness, sandals appear to me much better adapted than the shoe, as it allows of greater flexibility and movement. Lawrence in his 'Lectures on Man' says, that the calves of the leg in the Negro race are very high, so as to encroach upon the hams. His observation I can fully corroborate, as well as Dr. Winterbottom's remark respecting the largeness of the feet, and the thinness and flexibility of the fingers and toes."—*Serra Leone*, by Robert Clarke, p. 49. Mr. Louis Fraser also says, "He will pick up the most minute object with his toes; his 'great' toe is particularly flexible."

† "It is quite certain that the ape which most nearly approaches man, in the totality of its organisation, is either the chimpanzee or the gorilla; and as it makes no practical difference, for the purposes of my present argument which is selected for comparison, on the one hand, with man, and on the other hand, with the rest of the primates, I shall select the latter (so far as its organisation is known) as a brute now so celebrated in prose and verse, that all must have heard of him, and have formed some conception of his appearance. I shall take up as many of the most important points of difference between man and this remarkable creature, as the space at my disposal will allow me to discuss, and the necessities of the argument demand; and I shall inquire into the value and magnitude of these differences, when placed side by side with those which separate the gorilla from other animals of the same order. In the general proportions of the body and limbs there is a remarkable difference between the gorilla and man, which at once strikes the eye. The gorilla's brain-case is smaller, its trunk larger, its lower limbs shorter, its upper limbs longer in proportion than those of man. I find that the vertebral column of a full-grown gorilla, in the Museum of the Royal College of Surgeons, measures 27 inches along its anterior curvature, from the upper edge of the atlas or first vertebra of the neck to the lower extremity of the sacrum; that the arm, without the hand, is 31½ inches long; that the leg, without the foot, is 26½ inches long; that the hand is 9½ inches long; the foot 11¼ inches long. In other words, taking the length of the spinal column as 100, the arm equals 115, the leg 96, the hand 36, and the foot 41. In the skeleton of a male Boegsleman, in the same collection, the proportions, by the same measurement, to the spinal column taken as 100, are—the arm 78, the leg 110, the hand 26, and the foot 32. In a woman of the same race the arm 83, and the leg 120, the hand and foot remaining the same. In a European skeleton I find the arm to be 80, the leg 117, the hand 26, the foot 35. Thus the leg is not so different as it looks at first sight, in its proportions to the spine in the gorilla, and in the man, being very slightly shorter than the spine in the former, and between one-tenth and one-fifth longer than the spine in the latter. The foot is longer and the hand much longer in the gorilla; but the great difference is caused by the arms, which are very much longer than the spine in the gorilla, very much shorter than the spine in the man."—*Evidence as to Man's Place in Nature*, by T. H. Huxley, 1863, p. 70.

and legs are all weak in comparison to the corresponding limbs in the European. The hand is always relatively larger than in the European: the palm is flat, the thumb narrow, long, and very weak.

Dr. Pruner Bey has published the subjoined measurements\* of the isolated bones in Europeans and Negroes. From Dr. Broca's careful investigations, it results that the radius is decidedly longer in Negroes than in Europeans in proportion to the length of the humerus.† The proportion of the radius to the humerus, taken at 100, being in the Negro 79.40, and in the European 73.93.

The great distinguishing characters of the Negro are the following: the forehead is flat, low, and laterally compressed. The nose and whole face is flattened, and the Negro thus has a facial angle generally between 70-75 degs., occasionally only 65 degs. The nasal cavities and the orbits are spacious.† The skull is very

\* M. Pruner gives the following measures of the bones of the limbs in centimeters.

Designation of Measures	Mean Measures.				Individual Measures.			
	Negroes		Europeans		Negroes		Europeans	
	Fe- males	Ma- les	Fe- males	Ma- les	Wo- man.	Ma- n.	Wo- man.	New- born
Total height of Skeleton.....	160.04	146.68	172.23	164.42	136.0	160.0	157.0	42.25
Femur.....	44.72	42.50	47.00	44.00	43.0	45.0	42.0	101.0
Tibia.....	38.06	35.58	38.76	37.71	36.0	38.0	36.0	25.0
Humerus.....	24.80	21.88	25.00	23.57	21.0	24.0	23.0	22.0
Radius.....	31.27	29.60	33.72	33.57	31.5	34.0	33.0	6.2
Length of hand.....	18.54	17.00	18.84	18.14	18.0	20.0	17.0	13.0

N.B.—“The preceding measures having been taken on skeletons, are only strictly correct as regards the isolated bones: femur, tibia, humerus, and radius. The lengths of hand and foot, and the total height of the skeleton, can only be approximative, as they are more or less modified by the mounters of the skeletons.”

“By the side of the mean measures I have placed six individual measurements, viz.: a Negro and European of the same stature, and a European female and a Negroess of the same height; and also a new-born European infant and a European child five years old. I wished to add a European child from thirteen to fifteen years old. It is at that age, according to M. Carnus, that our children most approach the Negro by the relative dimensions of their extremities.

“The skeletons of the European females, which served for measurement, are in the gallery of the museum, having been placed at my disposal by the kindness of M. Quatrefages. Nearly all of them are those of females above the middle height.”

† *Bull de la Soc. Anthro.*, iii, p. 162.

‡ *Facial cranium*.—“Before considering the anatomical details of the facial cranium, it is indispensable to note the disproportion existing between the size of the face and the cerebral cranium. This character, already indicated

hard and unusually thick, enabling the Negroes to fight with, or carry heavy weights, on their heads. The coronal region

by Curvier depends chiefly on the excessive development of the jaws and the size of the cavities of the organs of sense. The orbits are large, funnel-shaped, with obtuse angles; their inferior margin is thick, round, more advancing than the superior margin; the inferior is flattened; the depression lodging the lacrymal gland is very deep. The lacrymal canal is large, and almost exclusively formed by the nasal apophysis of the maxillary. The bones of the nose are short, narrow but quadrangular, very rarely triangular, and exceptionally soldered together, always joined at obtuse angles; they are sometimes on the same plane. The nasal aperture is large, of an irregular triangular form, wide, without a spine, or only the rudiment of one. The root of the depressed nose is only exceptionally in a right line with the forehead; the width of the root of the nose increases the distance between the eyes a little more in the Aryan, but less than in the Turanian race. Sometimes the nose of the Negro resembles, by its round aperture, that of the Hottentot. The cornets, especially the middle, are swelled out; the vertical lamina of the ethmoid is spread out, and the vomer stands out.

“The malar bones are neither large nor high, but are either embossed in the centre of their external surface, or distorted outwards by their inferior border. The superior jaw presents frequently in its malar apophysis a vertical pit; then the cheekbones form an angle, and their prominence appears great. When, on the contrary, the apophysis is flattened, and the inferior border of the malar is much advanced, this character, joined with the narrowness of the forehead, gives to the face a form approaching the pyramidal shape. The prominence of the external orbital apophyses of the coronal, the projection of the malar bones, and the antero-posterior direction of their frontal apophyses produce a malar angle less open than in the Aryan race; whilst, on the contrary, the lateral compression of the anterior lobe of the brain is marked by rather a right angle formed by the external wall of the orbit with the temple. The ascending apophyses of the maxillary have their internal border more or less curved according to the shape of the nose.

“Prognathism, that is to say, the inclination of the alveolar border of the superior jaw downwards and forwards from behind constitutes one of the most constant characters of the skeleton of the Negro. Three degrees are distinguished:—

“(1.) The alveolar arch, elliptic instead of parabolic, generally convex throughout, rarely concave at its external part, is alone inclined, and the teeth are vertical.

“(2.) The direction of the teeth is that of the jaw. In these two cases the superior incisors pass a little beyond the superior dental arch.

“(3.) The highest degree, which may be called double prognathism, presents itself when the inferior incisors are, like the superior, projected obliquely; then the junction of the two rows of incisors form the angle of a chisel. This latter form is not the most frequent. But in double prognathism, cases have been observed where, by a slight shortening of the horizontal ramus of the inferior maxillary, the superior incisors presented upon their posterior surface triangular facets produced by the points of the inferior incisors.

“The molar teeth of the superior jaw descend sometimes lower than the incisors, or are at least at a level with them, but rarely do the molars in the Negro participate in prognathism, as is the case with some Austrians, or Oceanic Negroes. Never is, to my knowledge, the prognathism of the Negro confined to a simple inclination of the alveoli. I have only remarked this disposition in some female crania of the Aryan race of India.

“The palatine arch, and especially the alveolar apophyses are not merely much elongated, but more enlarged in the Negro than among the Aryans. This arch is, on the average, about sixty-five millimeters in length in the Negro, and only fifty-eight in the Aryan.

is arched, but not so much developed as in the European woman. The posterior portion of the skull is increased, in proportion to that of the anterior part being diminished. But M. Gratiolet has shown that the unequal development of the anterior lobes is not the sole cause of the psychological inequalities of human races. The same scientific observer has also stated that in the superior, or frontal races, the cranial sutures close much later than in the inferior or occipital races. The frontal races he considers superior not simply from the form of the skull, but because they have an absolutely more voluminous brain. The frontal cavity being much larger than the occipital, a great loss of space is caused by the depression of the anterior region, which is not compensated for by the increase of the occipital region. From these researches it appears that in the Negro the growth of the brain is sooner arrested than in the European. This premature union of the bones of the skull may give a clue to much of the mental inferiority which is seen in the Negro race. There can be no

"The inferior jaw, always more or less massive, is distinguished by a chin, retracted, generally large and rounded, rarely pointed, and by the thickness and length of its external ramus. Its ascending ramus are large, short, and their junction with the horizontal are rarely at right angles. The coronoid apophyses are always large, with an elliptic surface, flattened or oblique on its external half. The glenoid cavities are large and mostly of little depth. The teeth of the Negro are long, large, strikingly white, and not easily used up. The inferior molars sometimes present five tubercles, an anomaly which is sporadically found in all races of mankind. The jaw of the Negro never presented to me any trace of an intermaxillary bone (I owe to M. E. Rousséant's kindness the firm conviction of the non-existence of the intermaxillary bone in man in the normal state. His treatise places this important fact, now for ever acquired by anatomical science, beyond any doubt), though the incisive suture may be perfectly distinguished in the adult Negro at a period when the cranial sutures are mostly obliterated.

"The consistence of the cranial bones of the Negro is always considerable; but their thickness varies much, chiefly according to the volume of the cranium. Placed by the side of the Oceanian Negro, for instance, the cranium of the African would in this, as well as other respects, produce the impression of belonging to a civilised man, opposed to that of a savage, if this term be applicable to a man who, more or less, lives in a state of nature.

"Before quitting the examination of the cranium, I cannot pass over the facial angle of the Negro. It naturally varies, as in the other races, according to the greater or lesser inclination of the face, according to the development of the frontal sinuses; and, as regards the conformation of the face, it sinks, though rarely to 70°. But, on the other hand, the frontal angle of the Negro reaches to 80°. We, however, attach but a relative value to these two angles, for though the median line of the forehead is rather vertical in the Negro, the cranium is faulty, as regards the forehead, by an evident lateral contraction." (Pruner-Bey).

doubt that at puberty a great change takes place in relation to psychical development; and in the Negro there appears to be an arrested development of the mind exactly harmonising with the physical formation. Young Negro children are nearly as intelligent as European children; but the older they grow the less intelligent they become. They exhibit, when young, an animal liveliness for play and tricks far surpassing the European child. The young ape's skull resembles more the Negro's head than the aged ape; thus showing a striking analogy in their craniological development.

It has been pointed out that there were four forms of the human pelvis, and that they might be classified under the following heads:—The oval (European), round (American), square (Mongol), and oblong (African). The latest researches of Dr. Pruner-Bey enable him to affirm that this law is perfectly applicable to the Negro. The head of the Negro is the best type of the long skull, with small development of the frontal region. The form of the pelvis is narrow, conical, or cuneiform, and small in all its diameters. Yolk has asserted that the pelvis of the male Negro bears a great resemblance to that of the lower mammalia. With respect to the capacity of the cranium of the Negro, great difference of opinion has prevailed.\*

\* Dr. Pruner-Bey gives the following interesting summary of the Osteological peculiarities of the Negro race:—  
*Of the Cranium.*—"The antero-posterior diameter of the cerebral cranium approaches 19 centimeters; the transversal diameter is about 13.6; the face measures, from the chin to the hair, 18 centimeters; and the distance of the zygomatic arches is 13 centimeters. I class the cranium of the Negro in the category of harmonic dolichocephali.

*Cerebral Vertebrae.*—"The coronal bone is rather short and narrow than receding backwards, frequently distinguished by slender superciliary arches, rarely by frontal humps, but usually by a protuberance on the median line, which corresponds to the third primordial convolution of the brain. A slight compression is clearly marked on the two sides of the protuberance. The nasal apophysis is always more or less large, according to the conformation of the nose. The orbital apophyses, large at the base, are more curved downwards than outwards. The temporal portion of the coronal presents frequently on the top a slight dilatation, at the bottom on the contrary it is compressed. The contours vary, according to the general form of the cranium in which this is very much elongated and compressed on the sides, the coronal is more elliptic, and more parabolic when the contrary is the case. The frontal sinuses exist; they are but moderately developed as all the aërial reservoirs. The summit of the cranium presents along the sagittal suture an oval or flattened, rarely vaulted, conformation. The great extent of the second cranial vessels, and its predominance over the first and third, is clearly defined, specially at the posterior part where the parietals slope gently down towards the occiput, whilst their descent towards the temples is always very

man's researches, although very limited, have until recently been accepted as conclusive. He stated it as his opinion that

"The brain of the Negro is, upon the whole, quite as large as that of the European and other human races; the weight of the brain, its dimensions, and the capacity of the *cavum crania* prove

abrupt. In cases where the cranium of the male negro approaches the female type, the posterior descent of the parietals approaches a vertical line, and the horizontal section represents a wedge, instead of an ellipsis, which predominates in the typical form of the Negro cranium.

"When the cranium is viewed in profile, the temples appear deeply hollowed in front, flattened or elongated backwards. The anterior margins of the temporals are frequently joined to the coronal, on account of the shortening of the great aëæ of the sphenoid. The parietal knobs are lower and less marked in the male than in the female, and the superior semicircular lines, though well marked, reach rarely the arch of the cranium. The squamous part of the temporal is relatively low and long; its margins are irregular. The zygomatic arches are convex, rarely flattened; the meatus auditorius presents a large and usually round orifice. The greatest width of the cranium is thus as frequently found at the posterior and superior angle of the squamous temporal as at the level of the parietal protuberances. Taken from this point, the cranium diminishes in breadth towards the occiput, especially when the latter projects, which is seen in most cases. There is a rather striking parallelism between the coronal and the superior part of the occipital squama; the latter being relatively small, curved, narrow, like the frontal squama, and in the elliptic crania it is arched in the centre. In this case its margins intercept an obtuse angle; in the contrary case they are parabolic. The Wormian bones may be met with in the crania of Negroes, and even form a complete series along the lambdoid suture; but these cases are rare.

"The base of the cranium is always relatively narrow; that part of the occipital squama where the muscles are attached, presents sometimes a horizontal, but more frequently a slightly inclined, long, and narrow plane. In the first form the superior part of the squama rises more to a right angle towards the lambdoid suture than in the second form. The surface of the squama, marked by the imprint of the muscles, represents a truncated pyramid the base of which touches the anterior border of the great occipital foramen. This aperture, always of a more or less elongated shape, is slightly inclined from before backwards, so that its posterior border at least is above the level of the palatine arch. Its position in relation to the centre of gravity is in accord with dolichocephaly. (The distance from the occipital hole to the base of the nose and the alveolar margins of the incisors, is naturally more considerable in the Negro than in the orthognathous races; but the distance of this hole to the base of the forehead, presented only slight differences. In the brachycephalous races, on the contrary, especially in those with flattened occiput, the occipital foramen is farther back. It is, moreover, difficult to find crania in which this aperture corresponds exactly to the centre of the cranium, as asserted by some anatomists.) The condyles of the centre are elongated, narrow, much inclined. The petrous portion of the temporal volume. The basilar bone is long, narrow, slightly inclined from before backwards. The development of the mastoid apophyses corresponds with the greater or lesser massiveness of the cranium; the styloid apophyses are frequently much elongated; the pterygoid apophyses are large, distant, and more or less inclined. The union of the palate with the maxillary is usually formed by an indented or undulated, instead of by a plain suture. The palate is elongated, elliptic rather than parabolic, superficial, or deep. It is only in exceptional cases that its width exceeds its length. All the apertures at the base of the cranium are very spacious. We are at the same time struck by the elliptic contours of this base and its general flatness, which renders the elevation of the borders of the occipital foramen more perceptible."

this fact.\* All recent researches have, however, done much to show that Tiedemann's investigations are not only unsatisfactory, but that his deduction is not warranted by the facts which we now have at hand. Blumenbach's, Knox's and Lawrence's conclusions did not accord with Tiedemann's. But the most satisfactory researches on this point are those made by the late Dr. Morton, of America, and his successor, Dr. J. A. Meigs, of Philadelphia. Dr. Meigs, in following out the researches of his predecessor, has found that in size of the brain, the Negro comes after the European, Fin, Syro-Egyptian, Mongol, Malay, Semitic, American Indian, and the Esquimaux; but that the brain of the Negro-race takes precedence of the ancient civilised races of America, the Egyptian of all periods, the Hindoo, the Hottentot, the Australian, and the Negroes of Polynesia. Thus we see that the Negro has at least six well-defined races above him, and six below him, taking the internal cavity of the skull as a test. Pruner Bey says that his own experience with the external measurements did not yield essentially different results. But we now know that it is necessary to be most cautious in accepting the capacity of the cranium simply, as any absolute test of the intellectual power of any race.

The recent researches of Huschke on this point are most significant and valuable. He gives the following mean measurements of the surface of the cranium, viz. :—

Male Negro.	65206 square millimètres.	Male European.	65805 square millimètres.
Female.	49868	Women.	53375

Relative size of three cranial vertebræ expressed in hundredths (1).

	Negro.	Negress.	Male European.	Female European.
1st Vertebra	7.7	8.1	9.7	9.68
2nd and 3rd together	92.3	91.9	90.3	90.32
2nd Vertebra alone	100.0	100.0	100.0	100.00
3rd Vertebra	75.7	76.4	72.7	74.1
	24.3	23.6	27.3	25.9
	100.0	100.0	100.0	100.0

"It is surprising," says Pruner Bey, who quotes these tables,

\* Philosophical Transactions, 1836.

"to observe to what a degree the mean capacity of the Negro cranium\* approaches in its *ensemble* that of the European female, and particularly how much in both the middle vertebra predominates above the two others; whilst on the contrary, in the European male, the posterior vertebra, and particularly the anterior, are more developed in relation to the middle vertebra than they are in the Negro and in the European female. It

\* Pruner Bey quotes the following Table respecting the cerebral cranium of the Negro.\*

DESIGNATION OF MEASURES.

Mean Measures in Millimeters.  
 Mean of 24 Negroes.      Mean of 12 Negroesses.

1°. DIAMETER (BY COMPASS).

Antero-posterior Vertical	186.4	176.4
Inferior frontal	124.8	95.8
Superior frontal	100.0	108.7
Bi-temporal	113.4	119.2
Bi-auricular	125.0	108.0
Bi-parietal	112.7	130.0
Bi-mastoidian	134.2	111.6
Vertical	117.7	

2°. CURVES (BY METRICAL TAPE).

Horizontal circumference	511.7	492.5
Transversal bi-auricular curve	306.2	295.5
Vertical antero-posterior circumference	504.0	489.8
Decomposed in:	105.0	108.3
1°. Middle part	186.5	128.3
2°. Inferior part	114.4	109.9
3°. OTHER MEASURES.	35.9	34.0
Distance from the anterior margin of the foramen to the frontal eminence	112.2	104.3
Distance in a straight line from the meatus auditorius to occipital protuberance	148.1	138.3
Dimensions of the occipital foramen	35.9	34.0
Distance in a straight line from the meatus auditorius to occipital protuberance	110.9	107.0
Dimensions of the occipital foramen	35.9	34.0
Distance in a straight line from the meatus auditorius to occipital protuberance	30.3	28.0

3°. OTHER MEASURES.

Distance in a straight line from the meatus auditorius to occipital protuberance	113.1	107.1
Dimensions of the occipital foramen	35.9	34.0
Distance in a straight line from the meatus auditorius to occipital protuberance	30.3	28.0

4°. MILLIMETRAL RATIO.

Circumferences	1000	1000
vertical	985	984
length (antero-posterior diameter)	1000	1000
breadth (parietal diameter)	790	737
height (vertical diameter)	669	685

\* See *Memoires de la Société d'Anthropologie*, 1861.

should be remarked that the occipital vertebra of the Negress is more spacious than that of the Negro."

Viedemann asserted that the brain of the Negro did not resemble that of the Oran-tan more than that of the European, except in the more symmetrical distribution of the gyri and sulci. Viedemann also denied Sömmerring's assertion that the nerves of the Negro are larger, in proportion to the brain, than in the European; but Pruner Bey has confirmed Sömmerring's opinion.

There seems to be, generally, less difference between the Negro and the Negress,\* than between the European male and female; but on the other hand, the Negress, with the shortened humerus, presents a disadvantage "which one might be tempted to look at as a return to the animal form" (Pruner). Lawrence says,† "the Negro structure approaches unequivocally

\* *The Negress*.—"Before reviewing the chief varieties which the Negro type offers to travellers, it is necessary to cast a glance at the Negress.

† "She possesses a cranium shorter, rounder and wider in the posterior part of the middle vertebra; the parietal protuberances are more prominent, the apertures of the orbits frequently nearly circular, characters which approach her a little to the European female. As regards stature and the length of the hair, as well as in the proportions of the parts composing the inferior limb, the Negress resembles her husband more than the European female resembles her husband. As regards the latter point, it is not rare to find also in Europe, females of high stature and a muscular aspect. The features of the face do not, in the two sexes of the Sudan, present the same differences as in the Aryan race. The mammae are less rounded, but already more conical in early age. Their relaxing is rapid and excessive. This peculiarity is, however, though in a less degree, found in Oriental females in other places, and of different origin. The pelvis presents, as regards width, some advance over that of the male; the iliac bones are inclined towards the horizon, thinning towards the centre, without, however, being transparent; the haunches are rounder, stentopgy (fatty lumps on the buttocks) is only exceptionally met with. The neck of the matrix is large and elongated; the aperture of the vagina has a forward direction, despite of the inclination of the pelvis" (Pruner Bey.)

† Mr. Lawrence thus summarizes the chief physical characters of the Negro "The characters of the Ethiopian variety, as observed in the genuine Negro tribes, may be thus summed up—1. Narrow and depressed forehead; the entire cranium constricted anteriorly; the cavity less, both in its circumference and transverse measurements. 2. Occipital foramen and condyles placed farther back. 3. Large space for the jaws altogether, and particularly of ment of the face. 5. Prominence of the jaws obliquity of the facial line. 6. Superior incisors slanting. 7. Chin receding. 8. Very large and strong zygomatic arch projecting towards the front. 9. Large nasal cavity. 10. Small and flattened ossa nasi, sometimes consolidated, and running into a point above."—*Lectures on Physiology, Zoology, and the Natural History of Man*, 1819, p. 363.



to that of the ape," while Bory St. Vincent,\* and Fischer† do not greatly differ in their description of the anatomy of the Negro from the facts I have adduced.

There is no doubt that the Negro brain† bears a great resemblance to a European female or child's brain, and thus

\* Bory de St. Vincent (*J'homme*, Paris, 1827) says:—"Large: the skin black and entirely glossy, with the rete mucosum of Malpighi thicker and also black; hair black, woolly, faked together; the anterior part of the skull very narrow; flattened on the vertex, and rounded behind; eyes large, subtroubled, prominent, always damp, cornea, yellowish, iris tinted of a chestnut black, eye-tubercular; ears of moderate size and prominent; lips thick and brown; inside of the ears bright red; jaws, especially the lower one, projecting; incisor teeth prominent; chin short, round, receding; beard rare; breasts pear-shaped, loose during milking; thighs and shanks partially curved."  
† Fischer (*Synopsis Mammivora*, 1829-30), says:—"The brain is less, and the origins of the nerves thicker than in the American races, an opposite condition prevailing in the Japetic races; skull-cap one-ninth less ample than in the European, sutures more narrow; all the bones whiter; infermaxillary bone inclining above the chin; pelvic bones broad; muscles, blood, and bile of deep colour; foetal sweat; filthy; voice sharp and shrieking; nervous-phlegmatic temperament."

† Pinner-Bey makes the following observations respecting the brain: "Sawmerring had already observed that the peripheral nerves are larger, relative to the volume of the brain, in the Negro than in the white man. This fact is demonstrated in all its details by the beautiful preparation from the skinned hand of M. Jaquart, exhibited in the gallery of the Museum of Natural History."

"The brain, narrow and elongated, presents on its surface always a brownish tint on account of a considerable injection of venous blood. The superficial veins are very large, and resemble by their stiffness the sinns of the dura mater. The grey matter shows in the interior a clear brown colour; the white blood than to a special pigment. Melanotic patches may be met with in the meninges as elsewhere. Sawmerring has observed blackish spots on the hemispheres is of less thickness than in the European. Regarded in front the brain presents a rounded point; from the top the parts appear grosser anterior and the lateral, are flat and of little depth, excepting the convolution, the curvature of which produces the frontal eminence. In following the undulations from the front backwards, we remark less lateral deviations in the convolutions, which render the Aryan brain a real labyrinth. In the middle lobe the convolutions seem considerably raised, but they are as the anterior at the base. Viewed in profile, it is chiefly the direction of the fissure of Sylvius and its interior which has occupied the direction of anatomists. (Fuschke cites with reserve the observations of Van der Kolk, who phases in parallel some peculiarities of this region of the Negro brain with the disposition existing in apes. This part of cerebral anatomy has as yet been little cultivated, and before arriving at conclusions we should wait until the modifications which the human brain undergoes in all the periods of its development are better known than they are at present; hence I confine myself simply to draw attention to Van der Kolk's remarks. In order to establish race characters upon such data, we should not forget what Kousseau says of the brain of Cuvier: "Multiplied convolutions were in the centre, sur-

approaches the ape far more than the European,\* while the Negress approaches the ape still nearer.

With regard to the chemical constituents of the brain of the

mounted by a mammiated exuberance, which formed an integral part of these convolutions." Are we on that account disposed to assume that this great man belonged to another race? With regard to the former, I have never been able to observe any appreciable difference between the brain of the Negro and that of the Egyptian, which I have placed side by side in order better to study the relation of the parts externally. The superior part of the brain above the corpus callosum is relatively little elevated. The cerebellum has a less angular form than in the European; the vermis and the pineal gland are very large. Finally, the consistence of the cerebral mass is unquestionably greater in the Negro than in the white man.

"The inspection of the Negro brain shows that the convolutions of the centre are clearly marked as in the Aryan foetus of seven months (Reichert), and that the secondary details are less distinct. By its rounded apex, its less developed posterior lobe, it resembles the brain of our children; by the prominence of the parietal lobe it resembles that of our females, only that the volume of the vermis and the pineal gland also place the Negro by the side of the Aryan child.

"Having indicated the general characters relating to the external form of the great nervous centre, I must say a word with respect to its weight and the relative proportions between cerebrum and cerebellum. The number of observations on this point is very restricted, nevertheless we obtain some very important points. First, the extremes present a scarcely credible difference, were it not confirmed by the great diversity in the measurement of the horizontal circumference of the cranium. Masegny gives 738 grammes as the weight of one brain and 1587 grammes as the weight of another. The results obtained by Sawmerring and Cooper seem to approach the average weight: 1354.5 and 1458 grammes. The mean for the weight of the average weight: compared to that of the cerebellum would be : : 13,83 : 85,93. Measurement shows that the cerebellum of the Negro, in accord with the general form, exceeds by 2,13 in length that of the European, which is, however, broader. Weight and measurement establish that the two sexes present less differences in both respects in the Negro race than in the Aryan race."—Pinner Bey.

"The situation of the foramen magnum of the occipital bone is still a matter of dispute. Dr. Prichard thought it to be the same in the Negro as in the European, and so it may be, if no allowance be made for the face. The situation of the foramen magnum of the occipital bone is not the same in the Negro as in the European. Dr. Prichard says it is exactly behind the transverse lines bisecting the antero-posterior diameter of the base of the cranium. Supposing this measurement to be correct, which it is not, it has nothing to do with the pose or position of the head upon the vertebral column, bone. A line bisecting the antero-posterior diameter of the skull, and dividing into two equal parts, passes in the European head through the centre nearly to the antero-posterior diameter of the entire head. Not so in the coloured races. In speaking of the base of the cranium, I am not quite sure to which Prichard and his followers allude; for very generally in anatomical works the base of the skull, including the upper jaw, is confounded with the true base of the skull." Robert Knox. *Anthropological Review*, vol. i, p. 266.

M. Broca has well pointed out the contradictions of Prichard as to the position of the foramen magnum, and clearly establishes the fact that it is placed further back in the Negro than in the European. *Bull. de la Soc. d'Anthropologie*, vol. iii., p. 524.

Negro, little that is positive is yet known. It has been found, however, that the grey substance of the brain of a Negro is of a darker colour than that of the European, that the whole brain has a smoky tint, and that the *pia mater* contains brown spots, which are never found in the brain of a European. M. Broca has recently had an opportunity of confirming the truth of this statement.\* With regard to the convolutions, there is unanimous testimony that the convolutions of the brain of the Negro are less numerous and more massive than in the European. Wartz thinks that the only resemblance of the Negro's brain to that of the ape is limited to this point.† Some observers have thought they have detected a great resemblance between

\* The following observations by M. Paul Broca on the brain of the Negro is extracted from *Bulletins de la Soc. d'Anthropologie*, 1860. Before reading a manuscript addressed to the Society by Professor Gubler, of the Faculty of Medicine, M. Broca stated the circumstances which induced Professor Gubler to present it. A negro died in the Hospital de la Pitié. The body was brought to the amphitheatre of Clamart, when M. Broca asked of the prosecutor of the hospital to examine the brain of that body. Owing to the great heat of the month of August, the body was already in an incipient state of decomposition, and the brain was too soft to study the convolutions. M. Broca had, therefore, to confine himself to examining the convolutions. In order to render the examination more easy, M. Broca opened at the same time the cranium of a white subject, which was brought in the same day. The *pia mater* of the Negro presented in certain spots a brown tint; nothing of the kind existed in the white subject. The white substance of the Negro brain had a smoky tint, but it was especially in the grey substance that the brown tint was marked. The two brains were placed in two separate vases containing the same quantity of alcohol. After three days they were sufficiently firm to be examined. The difference of coloration was then as decided as on the first day. In order approximately to determine the relative weight of the two brains, they were, after the removal of the membranes, dried upon some linen during a few minutes, and placed in the scale. The brain of the white subject weighed 1003 grammes, that of the black weighed only 925.5 grammes, being a difference of 8.3 per 100. This individual fact would be insignificant if it did not accord with the known data. Thus it is well known that the measurements of the capacity of the cranium made by Meigs according to Morton's method, gave an average of 33½ cubic inches for European and Anglo-American crania, and only 82½ for Negro crania, being a difference of 114 cubic inches; that is to say, that the cranial capacity of the Negro being represented by 100, that of the European is represented by 112. M. Broca had presented in alcohol the least altered portion of the Negro brain, and presented it to the Anthropological Society; but fearing that the long contact with the alcohol might modify its coloration (which, however, it did not), he showed it when fresh to the Biological Society. Already, some ten years ago, M. Rayer made to the same Society an analogous present; and it is known that since Meckel in 1753 published a paper on this subject in the *Mémoires of the Prussian Academy of Science*, many authors have stated that the brain of the Negro is notably of a darker colour than that of the white man.†

† See Introduction to *Anthropology*, by Dr. Theodor Wartz. Edited from the first volume of *Anthropologie der Naturvölker*, by J. Frederick Collingwood, Esq., F.G.S., F.R.I.S., F.A.S.L., Hon. Sec. of the Anthropological Society of London, Foreign Associate of the Anthropological Society of Paris, p. 93.

the development of the temporal lobe in the Negro and ape; but much further observation is required on this important subject.

The eyes are more separated than in the European, but not so much so as in the Mongol. The aperture of the eye is narrow, horizontal, and both eyes are wide apart. All the teeth, especially the last molars, are generally large, long, hard, and very white, and usually show little signs of being worn. In some Negro-skulls there has been found an extra molar in the upper jaw. There is also sometimes a space between the incisors and canine\* teeth of the upper jaw. The inferior molars sometimes present in the Negro race five tubercles, and this anomaly is sporadically found in other races.† It has been noticed in the European and the Esquimaux, but is said by my friend Mr. Carter Blake to be more frequent in the Negro

\* "The conical form [of the canine] I find best expressed in the Mechanism race, especially the Australian. . . . It is also very well marked in the dentition of the Mozambique Negro, figured by F. Cuvier.—*Dents des Mammyfères*, pl. 1." Owen, *Odonography*, 4to, London, 1840-45, p. 452.

† "An examination of the teeth in a considerable number of African Negro crania has enabled us to draw the following conclusions:—In the African Negro the teeth are usually of large, but not excessive, size: they are regular, commonly sound, although caries is occasionally observed, and they seldom present that extreme amount of wearing down of the cutting and grinding surfaces which may be found so commonly in the Australian and Polynesian. The incisors are large, broad, and thick, but not of greater absolute dimensions than in numerous individuals amongst the white varieties. The teeth do not depart from the human type in their relative proportions; for whereas the incisors and canines are of considerable size, the true molars are likewise large, and maintain that superiority which is a distinguishing feature of the teeth of Man. The lateral incisors are well formed, and in the perfect entirety of their outer angles they adhere more invariably to the human type than to the same teeth in some more civilised races. The canines are not proportionally longer or more pointed than in the white man. The premolars are in configuration and relative size with the typical standard. The true molars are usually of large size, generally larger than in the European. The true denties sapientie, although smaller than the other molars, are in the majority of instances of greater relative and actual dimensions, and, as in other last-named teeth are usually distinct in both jaws. But in the character of their grinding surfaces and their general contour, the molars of the African Negro present no departure from the typical configuration, and, as in other races, there are many instances in which a general description will not entirely apply. . . . We would observe that, according to our limited experience, the general characteristics of the African Negro dentition are best exemplified (albeit liable to exception) in the Negroes of the Western Coast. The teeth in the crania we have seen from Eastern Central Africa, and from the Mozambique, appeared to us to present less markedly the minor differences above noticed. The prognathic development of the jaws also, and the consequent obliquity of implantation of the incisor-teeth, though common in a varying degree to all African nations, not excluding the Egyptians, attains its greatest development in crania from the Western Coast."—F. C. Webb, *Teeth in Man and Anthropoid Apes*, p. 41.

and Australian than in any other race. Sometimes Negroes have thirty-four instead of thirty-two teeth. The skin between the fingers, according to Van der Hoeven,\* reaches higher up than in the European. The skin is also much thicker, especially on the skull, the palm of the hand, and the sole of the foot. The *rete mucosum*, which is the chief seat of coloration, presents nothing particular as regards structure.† The hair of

\* *Bigtrogen tot de Natuurlijke Geschiedenis van der Negerstam*, Leyden, 1842.

† M. Pruner thus speaks of the skin:—"Having now indicated the more prominent characters of the skeleton, I pass to the examination of the Negro with his integuments."

"The skin, supple and cool to the touch, presents a velvety aspect (besides the shades of colour already mentioned). Upon the abdomen such prominences form zigzags and broken fine lines; on the forearm they are seen in the form of small lozenges, and even in the extremities the skin is not altogether smooth. This aspect is partly the consequence of the great development of the glandular apparatus, indicating a great turgescence of the tissues. Thus the skin of the penis does not merely present simple folds, but mammillated eminences. The dermis is thicker than in the other races, especially on the cranium, the palm, and the sole. The epidermis of an ash-grey colour is very resisting. The *rete mucosum*, which is the chief seat of the coloration, presents nothing particular as regards its structure. Its contents, viz., the pigment, is deposited in a shapeless mass, or in granules, chiefly around and in the interior of the nuclei of polyhedral cells, which are disposed in numerous irregular layers. The pigment presents shades of colour according to the position of the cells. The deeper and more coloured cells are of a blackish brown, whilst those approaching more the dermis of a more or less dilute yellow resemble the serosity of fine blood (Koelliker). The coloured web may be considered as the complement of the epidermis, to which it adheres more closely than to the dermis, so that it is detached in blistering, though some patches usually remain on the dermis. The colour of the cicatrices in Negroes differs according to the colour of the individual, and the time elapsed since the cicatrization. I have observed nothing noteworthy in this respect. It is known that the lines in tattooing present a deeper colour than the skin from the materials rubbed in.

"The Negro loses a portion of the pigment on being transported to the north. It is always upon the prominent parts, such as the nose, the ears, &c., that a slight diminution is observed in dark subjects. I have, however, never observed this change in individuals with a velvety black skin which has sometimes a bluish shade. But in chronic diseases the diminution of the pigment is very perceptible; thus the Negro grows in a certain manner, pale like the European. It is a general rule that the deeper coloured a Negro is, compared to other individuals of his tribe, the better is his health. With regard to the relation between the degree of coloration and the intellect, the accounts of travellers do not agree. Thus, Dr Barth asserts that in the centre of the Sudan, the most glossy jet black skin belongs to the most intelligent tribes. The example of the Yorubas seems to confirm this as regards the West. Mr. Speke, on the contrary, states with regard to the Eastern populations between Mozambique and Lake Nyassa, that the tribes of a lighter colour, though Negroes in all other respects, by far excel in activity, bravery, and intelligence their jet black brothers. Very probably both versions are correct; for we see in India, as well as Arabia, the two extremes of colour combined with the same intellectual capacities in peoples evidently congeners.

"The intensity of the colour does not depend on the geographical latitude in the tropical zone of Africa. The extremes of the chromatic scale are

the Negro is essentially\* different from that of the European, and consists of coarse, crisp, resembling a frizzly sort of wool,

in juxtaposition in the principal spots, on the Senegal as well as on the Gaboon, north of the Niger and south of Lake Tsad, towards the Bay of Biafra, as in Mozambique, where M. Froberville counted thirty-one different shades of colour. Continued displacements have so much intermixed the tribes, and amalgamated entire nations, that it would be vain to determine, even by approximation, the primitive country of the true Negroes, and to derive therefrom any theory regarding the influence of geographical latitude on coloration. It is equally impossible to establish the degrees of intermixture which the representatives of the chromatic map have undergone. But, taking the deep brown or black Negro as the starting-point, can we attribute his colour to the soil, the air, the position of the sun, the great fluctuations between the diurnal and nocturnal temperature, an altitude rich in carbon such as the butter-tree, fermented liquors, &c., on one side, and the physiological reaction of the organism on the other? Must we, as regards the latter point, take in account the important part which the skin and the liver take in the respiratory functions according as we proceed from north to south? Must we admit that, in this respect, extremes meet, so that in turning to the high north, we find the coloration increase as we approach the pole? Science is as yet not in possession of the necessary facts to solve this question; experimental physiology must encounter it. As regards the etiology of the colour of the Negro, we must recur to the laws of heredity."

The same author makes the following remarks respecting the distribution of the pigment on the mucous membrane, the subcutaneous tissue, and the viscera:—"The pigment is in the form of black patches, found not merely upon the tongue, the velum, the conjunctivæ, and the external angles of the eye, but also upon the mucous membrane of the intestinal canal, etc.

"The cellular tissue is very abundant, especially on the erectile organs. The mammae, penis, lips, ears, and nostrils. The colour of the conjunctivæ, always more or less injected, is more or less yellowish; the fat is always of a wax colour. An analogous coloration is observed in all the cellular and fibrous membranes and even in the peritoneum. The development of the muscles, excepting the masseters, the external muscles of the ear, the larynx, and sometimes of the temporals, are not in proportion to the weight of the bones; their colour is never of the bright red of the European, but rather of a yellowish tint, sometimes approaching the brown. M. Eschricht has found the muscles of the larynx very strong, the crico-thyroidals are especially large; he has moreover found that a portion of the fibres of these last muscles ascend to the internal surface of the thyroid cartilage. Should that be a trace of the internal crico-thyroid muscles of the hyolabæ apes? The visible mucous membranes of the mouth, the nostrils, etc., are of a cherry colour, excepting the lips which are bluish.

"As upon the skin, so is the glandular system much developed in the internal integument; the intestinal canal always presents a broken aspect, especially in the stomach and the colon. The intestinal mucous is very thick, viscid, and fatty in appearance. All the abdominal glands are of large size, especially the liver and the supra renal capsules; a venous hyperæmia seems the ordinary condition of these organs. The position of the bladder is higher than in the European. I find the seminal vesicles very large, always gorged with a turbid liquid of a slightly greyish colour, even in cases where the autopsy took place shortly after death. The penis is always of unusually large size, and I found in all bodies a small conical gland on each side at the base of the frenum.

"The vesicular apparatus is very strong; but the nervous system visibly

\* Dr Pruner-Bey has just contributed a most valuable paper to the Anthropological Society of Paris, *De la structure comme caractéristique des races humaines, d'après des recherches microscopiques*. A translation of this article will be found in the fourth number of the *Anthropological Review*.

growing in tufts like the wool of sheep. It is rarely more than three inches long, and generally not nearly so much.\* The larynx in the Negro is not much developed, and the voice resembles sometimes the alto of an eunuch. In the male the voice is low and hoarse, and in the female it is acute and shrieking; at least, this is the opinion that has generally been given by Hamilton Smith and others: but there appear to be exceptions, for Dr. R. Clarket says that "a pleasing manner, soft and winning ways, with a low and musical laugh, may in strict truth be declared to be the heritage of most of the Negro women." There is a peculiarity in the Negro's voice by which he can predominate over the arterial. The small arteries present everywhere numerous flexosities.

"The heart is powerfully organised and the right cavities are always very spacious. I have never observed here the least anomaly. The blood of the Negro (apart from anemia and the dropsy) is always very thick, viscid, and sticky; it rarely is projected in a jet in bleeding; it strongly adheres to the vessel, and always presents a serosity of a more or less dark yellow colour. The lungs relatively much less voluminous than the viscera of the abdomen, are usually melanose and pushed in by the stomach, the spleen, and the liver; it might be said that the latter organ usurps their place."

\* The hair of the adult Negro is very fine, hard and elastic; generally black, exceptionally of a fiery red, resembling wool, in describing several circles from 6 to 8 millimeters. Its length in the male is usually from 9-12 centimeters. In the Negroess of East Africa it rarely descends below the shoulders. These women wear the hair in small tresses, carefully greased. In the male the hair frequently has the appearance of a regular wig. Its insertion seems to follow another law in the Negro than in the white man. In the latter it presents irregular lines which converge and diverge in crossing, whilst in the former it is always circular. From this disposition frequently result separate tufts as in the Hottentot, and this peculiarity is very common among the Negroesses of which I have spoken.

"The hair of the Negro is not cylindrical. Transversal sections show that its circumference is always an ellipse, the large diameter exceeds the small diameter by 1-3rd to 3-5th. What is, moreover, remarkable, is that the large diameter, examined in different sections, does not remain parallel to itself; it turns as it were around the axis of the hair, so that the summits of these small ellipses, instead of being disposed in a straight line, describe around the hair two spiral curves (Koelliker). It is to this disposition that the crisp state of the hair of the Negro is due. With regard to the elementary microscopic structure, the hair of the Negro differs from that of other races only by its medullary portion. The central medullary and aeriferous canal which is clearly seen in hair with elliptical circumference, and of which some traces are found in the cylindrical hair of Turanians, is absent in the Negro, even in those of his race which have red hair.

"In the Aryan race, the hair of the same individual presents different shades in different parts of the body, but it is certain that the hair of the Negro is finer, elliptical and crisp, and that I have never found in it any trace of a medullary canal. The Negro race has, moreover, no down upon the body; and but few hairs on the pubes and armpits. The beard comes late in the male; it is silky or slightly crisp on the upper lip, more or less frizzled on the cheeks and the chin. The eyelashes curved; the eyebrows but little furnished are generally but little arched. The contrary is, according to Dr. Barth, observed in the Mousgous."—Pruener-Bey.

† *Transactions of the Ethnological Society*, vol. ii of New Series.

always be distinguished. This peculiarity is so great that we can frequently discover traces of Negro blood when the eye is unable to detect it. No amount of education or time is likely ever to enable the Negro to speak the English language without this twang: even his great faculty of imitation will not enable him to do so.

Having thus briefly recapitulated the anatomical peculiarities of the Negro, we now come to the physiological\* difference between the Negro and European.

\* Mr. Pruner Bey gives the following:—*Physiological Fragments*.—"The penetrating odour which the Negro exhales, has something anomalous and rancid; it is like the odour of the he-goat. It does not depend on the aqueous perspiration, for it is not increased by it. It is probably a volatile oil dissolved, without, however, entirely disappearing. We are not aware whether this race-character changes by a uniform diet, as is the case with the fishers and opossum hunters in Australia.

"The observations on the temperature of the internal cavities of the Negro race are not numerous enough to draw conclusions. It is, nevertheless, useful to note the results of the researches of M. d'Abbadie. In Upper Ethiopia, this celebrated traveller found at all seasons, in the buccal cavity of the Negro, a higher temperature than in individuals belonging to other races. The Negroess always preserve in Egypt this excess of temperature; not so the young Negroes: these have the mouth warmer than young men of other races in hot weather, but colder, on the contrary, in cold weather.

"The pulse of the Negro in Egypt nearly corresponds to that of the other inhabitants, being, from 60-70 pulsations per minute. The contrary is observed in male children, from 10-13 years, and in young females from 14-20: for the former 74-96; for the latter 84-104 pulsations per minute.

"The senses of the Negro are not developed as in other races which are nearer to the state of nature, or live in a different climate. Vision does not in the Negro surpass that of the European; the fattening of the cornea renders the Negro rather presbyopic than myopic. From his inclination and talent for music, hearing seems his most developed sense; at any rate he excels, in this respect, the Egyptian. To judge from the extent of the nasal cavities, smell ought to be very acute, such, however, does not appear to be the case. This applies also to the sense of taste; the Negro is omnivorous. Touch, this general corrector of the white races, is little developed in the Negro, which accords with the flattening of the tactile sensations. But the most striking phenomenon with regard to general sensibility, is the apparent apathy of the Negro to pain. In the most serious affections of internal organs, the Negro, arrived at a certain point, covers on his bed (at least in the hospitals) without responding by any sign to the care of his physician. However, in a state of civilised slavery, where he has acquired some knowledge, he becomes more communicative, without, however, betraying any manifestations of pain. Bad treatment causes the Negro, the Negroess, and the child to abundantly shed tears, but physical pain never provokes them. The Negro frequently resists surgical operations, but when he once submits, he fixes his eyes upon the instrument and the hand of the operator without any mark of restlessness or impatience. The lips, however, change colour and the sweat runs from him during the operation. A single example will support our view. A negroess underwent the amputation of the right half of the lower jaw with the most astonishing apathy; but no sooner was the diseased part removed, than she commenced singing with a loud and sonorous voice, in spite of our remonstrances, and the wound could only be dressed after she had finished her hymn of grace.

The assumption of the unity of the species of man has been based chiefly on the asserted fact that the offspring of all the

"The phases of development present in the Negro race some peculiarities which appear to me worth notice. We know next to nothing of the embryonic state. The Negro infant is born without prognathism, with an ensemble of traits which is more or less characteristic as regards the soft parts, but which is scarcely marked in the cranium. In this respect the Negro, the Hottentot, the Australian, the Neo-Caledonian, do not indicate in the osseous system the difference which will arise later. The new born Negro child does not present the colour of the parais; it is of a red colour mixed with bistre and less vivid than that of new-born European children. This premature colour is, however, more or less deep, according to the regions of the body. From reddish it passes to slate-grey, until sooner or later, according to the climate and soil, it corresponds to the colour of the parents. In the Sudan the metamorphosis, i.e., the development of the pigment, is generally completed at the end of the first year; in Egypt only at the end of three years. The hair of the Negro baby at first is rather chestnut than black; it is straight and slightly curved at the point. I was unable exactly to determine the extent of the fontanelles, but to judge from the cranium, the difference in this respect from the Aryan child is not appreciable.

"The first dentition commences nearly at the same epoch as with us. I have however, observed in Egypt cases of precocious as well as retarded dentition. Suckling continues during two years at least. After the first dentition, we already observe upon the cranium certain distinctive characters, viz.:—The median line of the forehead raised, the chin retracted, the superior jaw slightly inclined, the nose widened, the occiput prominent. Still the young Negro presents, until the time of puberty, a pleasing exterior. Puberty supervenes in girls between the ages of 10-12, and in boys between 13-15 years. It is then that the great revolution in the forms and proportions of the skeleton rapidly proceeds. This process and its results follow an inverse course as regards the cerebral and facial cranium. The jaws are enlarged without any compensation for the brain: it is not meant that there is an arrest of development—no, the difference of race manifests itself merely by a different order of increase in the growth of the respective parts. Whilst in the Aryan man the moderate increase of the jaws and the bones of the face is abundantly compensated and even surpassed by a development or rather enlargement of the brain, specially of the anterior lobe: the contrary takes place in the Negro. Great compression, chiefly lateral, produced from without inwardly by the muscles destined for animal life, small recession in the interior on part of the brain, and we have the mould of his cranium and his brain formed as we have described it. Everything is in harmony with the organism. No doubt this mode of viewing the conformation of the Negro cranium is open for discussion.

"The course taken by the obliteration of the cranial sutures, furnishes a significative commentary to these phenomena. The medio-frontal suture as well as the lateral part of the coronal suture is in the Negro invariably closed already in early youth. In the adult Negro the union proceeds then to the middle part of the coronal suture and the sagittal suture—or as I have observed on crania in East Africa—on all sutures at once. The lambdoid suture is that which remains open longest, especially on the summit. At the base of the cranium, on the other hand, the basilo-sphenoid suture is frequently found open. As regards the incisive suture, it not only persists in the infant Negro, but is very distinct in many Negro crania of an advanced age. The obliteration of the sutures seems in the Negro race to be more rapidly effected in the female than in the male.

"Prognathism has been, and may be considered, at least partly, as the result of the action of the inferior jaw on the concentric arch of the superior jaw. At any rate, the mode of articulation of this bone with the temporal, seems

mixtures of the so called races of man are prolific. Now this is assuming what yet has to be established. At present it is only proved that the descendants of some of the different races of man are temporarily prolific; but there is the best evidence to believe that the offspring of the Negro and European are not indefinitely prolific. This question is one which must be dealt with separately and proved by facts. At present we find that all *prima facie* evidence is against the assumption that permanent hybrid races can be produced, especially if the races are not very closely allied. This subject, however, merits a special discussion, and belongs to that large and important question—human hybridity. We, therefore, cannot agree with

much to contribute to it; for I have met with this conformation preferentially in the races in which the glenoid is large but of little depth, and the condyles of the maxillary more or less flattened, or at least elliptic; it coincides with a more or less pronounced harmony of the row of teeth. These conditions facilitate the movement of the jaw from behind forwards, whilst in the cranium rounded on pointed, the movement of the jaw is preferentially vertical. I am, however, well aware of the insufficiency of this etiology, and I ask myself whether prognathism is not simply the expression of a movement forwards animality. It has been thought that prolonged lactation may in the Negro favour prognathism; but I must observe that this custom prevails among many Oriental nations which are orthognathous. Moreover, it is known that the conformation is not exclusively peculiar to the African Negro. The majority of human races, whether dolicho- or brachycephalous, participate in it, as well as some civilised peoples: for instance the Peruvians, the Chinese, and Javanese Malays, at least the plurality of individuals comprising those nations. We find also exceptional cases more frequently in the ancient and modern Egyptians, less among the Jews, and less still in Western Europe. In all these cases, this conformation, however, does not exceed the first degree of the three distinct degrees we have established.

"It must also be observed that the relative depression of the middle part of the face joined to the prominence of the jaws, is the essential condition of prognathism, and of the results derived from the measurement of the facial angle. We thus comprehend that the two straight lines drawn from the nostrils and anterior to the forehead, and the alveolar border of the palatine suture, rarely present in favour of the latter a difference of two millimeters. This shows us that the depression of the nose in the Negro is as essential to produce prognathism, as the increase of the jaws from behind forwards. Par-turition, and lactation ordinarily give but little trouble to the Negro. Par-turition seems to be great, for she produces up to ten children; but the mothers and even the institutions much reduce the number of offspring. Decline commences in the Negroess between thirty-five and forty. Whilst the ugliness which accompanies age in the female is excessive, we find that in those the hair becomes early, and at an advanced age his external aspect loses its harmony. Even in the races of the Sudan, with clear complexions and expressive features, as for instance in the Foulahs, which some hesitate to place among the Negroes, Dr. Barth remarks on the ugliness they exhibit in old age. He observes that their face has something of the ape at that period, and he makes similar observations as regards the old ladies of the Maghrib tribe, whose harmonious features when young he so much admired."

the asserted statement, especially when we find that the two scientific men who have in recent times paid the most attention to this subject—I allude to Messrs. Broca and Nott—have come to the conclusion that the offspring of the Negro and European are not indefinitely prolific. With the permission of the Society, I will enter into that question at some future day.

M. Flourrens asserted that the Negro children were born white; recent observation has, however, shown that this is not the case. Benet, ex-physician of Ranjeet Singh, and Dumontier, affirm that the children are born chestnut colour. M. Pruner Bey confirms this fact from personal observation.

In the Negro race there is a great uniformity of temperament. In every people of Europe all temperaments exist; in the Negro race, we can only discover analogies for the choleric and phlegmatic temperaments. The senses of the Negro are said to be very acute, especially smell and taste; but Pruner Bey says that there has been much exaggeration as to the perfection of the senses of the Negro, and that his eye-sight in particular is very much inferior to the European. The most detestable odours delight him,\* and he eats everything.

While the anatomical and physiological questions must be decided by actual facts, there still remains to investigate the psychological peculiarity of the Negro. It is here, perhaps, that the greatest amount of misconception exists in the minds of the public generally, and not unfrequently in the minds of some men of science. Wedded to the theory of a single pair for the origin of man, they attempt to show that there is in mankind no variety, nothing but uniformity.

To show I do not exaggerate on this point, I will quote the words of an esteemed friend, which he read last year at Cambridge. He says:—"For as God made of one blood all the nations of the earth, and endowed them all with the same animal, intellectual, moral, and religious nature: so has he

\* Mr. Louis Fraser informs me that this is not always the case, and that sometimes a Negro will leave a vessel on account of a disagreeable odour, saying, "Cap'n, your ship stink too much, I can't stop."

bound them all together—in accordance with the high behest that they should increase and multiply and replenish the earth—in one common bond of universal brotherhood."

Mr. Dunn, however, it must be acknowledged, does not carry out the principles he here enunciates, for he fully admits the fact that, practically, Negro children cannot be educated with the whites. He also admits that some of the lower races are not able to conceive complex ideas, or have little power of thinking, and none of generalisation, although they have excellent memories.

The assertion that the negro only requires an opportunity for becoming civilised, is disproved by history. The Negro race has had communication with the Egyptian, Carthaginian, and Roman civilisations, but nowhere did it become civilised. Not only has the Negro race never civilised itself, but it has never accepted any other civilisation. No people have had so much communication with Christian Europeans as the people of Africa, where Christian bishops existed for centuries.\* Except some knowledge of metallurgy they possess no art; and their rude laws seem to have been borrowed and changed to suit their peculiar instincts. It is alleged that the Negro only requires early education to be equal to the European; but all experiments of this kind have proved that such is not the fact. With the negro, as with some other races of man, it has been found that the children are precocious: but that no advance in education can be made after they arrive at the age of maturity, they still continue, mentally, children. It is apparently of little consequence what amount of education they receive, the same result nearly always follows, the reflective faculties hardly appear to be at all developed. The dark races generally do not accept the civilisation which surrounds them, as is shown in the South Sea, where they remain the uncivilised race by the side of the Malays. The opinion of Dr. Channing of America, is often quoted respecting the Negro. He says:—"I would expect from the Negro race when civilised, less energy, less courage, less intellectual origi-

\* It is said that when the Negro has been with other races, he has always been a slave. This is quite true: but why has he been a slave?

nality, than in ours; but more-amiableness, tranquillity, gentleness, and content." Now, if it were possible to civilise them, there is no doubt they would show less energy, courage, and intellectual originality (of which they would be utterly deficient) and, as to their amiableness, tranquillity, gentleness, and content, it would be more like the tranquillity and content shown by some of our domestic animals than anything else to which we can compare it. It has been said that the present slaveholders of America "no more think of insurrection amongst their full-blooded slaves than they do of rebellion amongst their cows and horses!"\* It has also been affirmed (and I believe with truth) that not a single soldier has been required to keep order in the so called "Slave States" of America.

The many assumed cases of civilised Negroes are generally not those of pure Negro blood. In the Southern States of North America, in the West Indies and other places, it has been frequently observed that the Negroes in place of trust have European features, and some writers have supposed that these changes have been due to a gradual improvement in the Negro race, which is taking place under favourable circumstances. It is assumed that great improvement has taken place in the intellect of the Negro by education, which we much doubt. It is simply the European blood in their veins which renders them fit for places of power, and they often use this power far more cruelly than either of the pure blooded races. At the same time, there are doubtless many exceptions to this rule; depending perhaps on the amount of mixture of blood and inherited peculiarities. It has been affirmed that occasionally there are seen Negroes of pure blood who possess

\* "The Southern planter, with a consciousness of superiority that would be ashamed to resort to fiction or imposition of any kind, takes off his coat and works in the same field and at the same labour as his 'slave.' The thought of the latter contesting his superiority never once enters his mind. As said by a sound statesman and gallant soldier of the South, 'we no more think of a Negro statesman and gallant soldier of the South, 'we no more horses.' The planter rules as naturally as the Negro obeys instinctively; the relation between them is natural, harmonious, and necessary, and their interests being indivisible, there can be no cause or motive, either for the abuse of power on the part of the master, or of rebellion on the part of the servant."—*Negroes and Negro "Slavery."* By J. H. Van Evrie, M.D. New York, 1861, p. 29.

European features: but I believe such not to be the fact, and Pruner Bey also says that "with regard to the regular Caucasian features, with which some travellers have endowed certain Negro peoples, I must state that among many thousand Negroes who have come under my own observation, there was not one who could lay claim to it."

Instances have often been quoted of reputed European skulls with Negro characters. Such an instance there is in the College of Surgeons, another in Morton's museum, and one in Gall's collection; but if we admit these to have belonged to the pure race,\* we shall only be admitting that in one character the European skull sometimes resembles that of the Negro; but there will be plenty of other characters to show that they did not belong to the same race or species, and it ought simply to caution us not to base our ideas of race or species upon one character. We know that certain species of the mammalia frequently cannot be distinguished by the form of the skeleton, and we must therefore not be surprised to find that we are unable to prove a distinction of species in mankind if we take the cranium or even skeleton as a sole test.

We now know it to be a patent fact that there are races existing which have no history, and that the Negro is one of these races. From the most remote antiquity the Negro race seems to have been what it now is.† We may be pretty sure

\* A large amount of mixture has continually been going on between the natives and the traders, especially on the rivers. The traders are not the finest specimens of their race, and much of the immorality of the settlements may be owing to this mixed blood. The following custom has existed for ages, and renders most uncertain the parentage of some Africans who even come direct from the interior:—"The European stranger, however, travelling in their country, is expected to patronize their wives and daughters, and these unconscious followers of Lycurgus and Cato feel hurt, as if dishonoured, by his refusing to gratify them. The custom is very prevalent along this coast. At Gaboon, perhaps it reaches the acme; there a man will in one breath offer the choice between his wife, sister, and daughter. The women of course do as they are bid by the men, and they consider all familiarity with a white man a high honour."—*Wanderings in West Africa*, vol. 2, p. 24.

† As a proof that the African has not changed during the last 2,000 years, the following description of an "Aunt Chibe" of the days of Virgil may be interesting:—

Atha genus, tota pectusq; testante figura,  
Torta comam, Isbroque tumans, et fusca colorem;  
Pectore lata, jacens mamma, compressor alvo,  
Cunibus exilis, spiculis proligna plantis;  
Continuis trinis calcanea scissa rigebant.

that the Negro race has been without a progressive history; and that Negroes have been for thousands of years the uncivilised race they are at this moment. Egyptian monuments depict them as such, and holding exactly the same position relative to the European. Morton\* truly observes: "Negroes were numerous in Egypt, but their social position in ancient times was the same that it now is, that of servants and slaves."

Some writers have assumed that the Negro has degenerated from some higher form of civilisation, but we see no evidence to support such an assertion. We, however, fully admit that there are found traces of a higher civilisation, especially along the coasts visited, during all ages, by Europeans. The working of metals and imitation of European manufactures also exist in many parts of Africa. Indeed, there seems to be a great sameness in this respect throughout all Africa. Consul Hutchinson has given an interesting account of the finding of some implements used by the natives of Central Africa exactly resembling those used by the Anglo-Saxons.

Consul Hutchinson thus describes them:†—"You will be surprised, no doubt, to hear that I brought down with me from the tribes of Filatals, in Central Africa, iron heads of spears with wooden shafts and iron spiked ferrules, heads of javelins and arrows, double-edged swords, knives, beads for ornaments, potteryware for culinary purposes, exactly similar in pattern to those that are described by Mr. Wright, in a paper on 'Fausset Antiquities,' which he read before the British Association at Liverpool, in 1856, and which antiquities I need scarcely tell you were excavated at Canterbury, as well as proved to have been used in this country before the introduction of Christianity to our shores. Even the cowrie (the shell

As it is the fashion to quote Cooper on the Negro in anthropological discussions, I append his translation of the above, which although feeble, yet conveys the spirit of the original.

"From Africa she, the swain's sole serving maid,  
Whose face and form alike her birth betrayed;  
With woolly locks, lips tumid, sable skin,  
Wide bosom, udders flaccid, belly thin,  
Legs slender, broad and most missshapen feet,  
Chapped into chinks, and parched with solar heat,"

\* *Crania Egyptiaca*. Philadelphia, 1844 (eighth conclusion).  
† *Transactions of the Ethn. Soc.*, vol. i, new series, p. 328.

of the *Cyprea moneta*), which is described in Mr. Wright's paper as having been found among other relics of our Anglo-Saxon forefathers, is in this very day the currency among the Filatals. It may perhaps increase the interest of my statement, which can be demonstrated by the articles I brought home (being deposited at the Royal Institution museum at Liverpool), when I add that they were obtained from tribes who had no record of ever having been visited by any white man previous to the time of our voyage at the end of 1854."

There is good reason to believe that, as among all inferior races, there has been little or no migration from Africa since the earliest historical records. The European, for ever restless, has migrated to all parts of the world, and traces of him are to be found in every quarter of the globe. Everywhere we see the European as the conqueror and the dominant race, and no amount of education will ever alter the decrees of Nature's laws.

We hear much of late in this country of the equality of the Negro and European, because we have little real knowledge of the Negro; but in America the Negro is better known. As Dr. Van Etvie observes: \* "In the United States, among a people almost universally educated, and where the fact of 'equality' is almost universally understood and acted on, personally as well as politically, the advocacy of woman's 'equality,' in the sense that they (in England) argue it, or 'equality' of the Negro to the white man in any sense whatever, is inexcusable on the ground of ignorance; and those thus warring against the laws of nature and progress of society, deserve to be treated as its enemies, or as absolute maniacs, and irresponsible for the evils they seek to inflict upon it."

It has been assumed on very insufficient evidence that the Negroes in America improve in intelligence in every generation, and that they gradually approach the European type. M. Quatrefages recently directed our attention to this point, as did Sir Charles Lyell many years ago. It is affirmed that the head and body also approach the European without any mixture of the races.

\* *Negroes and "Negro Slavery."* New York, 1861, p. 10.



M. Quatrefoages quotes the following\* from M. Elisée Reclus: "We do not intend here to touch upon the question of slavery, we would merely state a certain fact—the constant advance of Negroes in the social scale. Even in physical respects they tend gradually to approach their masters; the Negroes of the United States have no longer the same type as the African Negroes; their skin is rarely of velvet black, though nearly all their progenitors have been imported from the Coast of Guinea; their cheekbones are less prominent, their lips not so thick, nor the nose so flattened, neither is the hair so crisp, the physiognomy so brutish, the facial angle so acute as those of their brethren in the old world. In the space of one hundred and fifty years they have, as far as external appearance goes, passed one-fourth of the gulph which separates them from the white race." I cannot assent to this, as I believe that no improvement takes place after the second generation.

On this point Dr. Nott † has very judiciously observed: "Sir C. Lyell, in common with tourists less eminent, but on this question not less misinformed, has somewhere stated that the Negroes in America are undergoing a manifest improvement in their physical type. He has no doubt that they will, in time, show a development in skull and intellect quite equal to the whites. This unscientific assertion is disproved by the cranial measurements of Dr. Morton. That Negroes imported into, or born in, the United States become more intelligent and better developed in their physique generally than their native compatriots of Africa, every one will admit; but such intelligence is easily explained by their ceaseless contact with the whites, from whom they derive much instruction; and such physical improvement may also be readily accounted for by the increased comforts with which they are supplied. In Africa, owing to their natural improvidence, the Negroes are more frequently than not a half-starved, and therefore half-developed, race; but when they are regularly and adequately fed, they become healthier, better developed, and more humanised. Wild horses, cattle, asses, and other brutes are greatly im-

proved in like manner by domestication; but neither climate nor food can transmute an ass into a horse, or a buffalo into an ox."

The real facts seem to be, that the Negroes employed in domestic labour have more intelligence than those who are employed at field labour, who are nearly in the same mental condition as when they left Africa. We must bear in mind, however, that there are only some of the African tribes of Negroes who are docile and intelligent enough for domestic purposes: the Ethiops are generally selected for this purpose. We see therefore in this improvement of the Negro simply the effect of education, but not of climate or other physical agents. We fully admit that the domestic Negroes are improved in intelligence in America, resulting from the imitation of the superior race by which they are surrounded; but much of the improvement in intellect is owing to the mixture of European and Negro blood. The Negro is not generally educated because it is affirmed that he is no sooner taught to read than he will take every chance of reading his master's letters; and if he be taught to write, he will soon learn to forge his master's signature. This applies with equal, and, perhaps, greater force to those free, semi-civilised Negroes who are held by some in such theoretical veneration.

I have intentionally avoided dwelling on the great diversity of physical type found in Africa, as this is foreign to our subject. There can be no doubt, however, that there is, both in North and South Africa every shade of colour and races with very different features. There are also in Central Africa some races such as the Mandingos, Fulas, and Wolofs, who are quite distinct from the typical Negro. In these races, some of the characters found in the typical Negro are found in only a very modified degree. How many races inhabit Africa, and their relation to one another, is not the subject of present inquiry. M. Pruner Bey has very judiciously made the following observations on this point:—

"We must admit that the inferior orbital margins are frequently narrow and retreating; that the noses become longer and more prominent; that the lips turned up in some tribes

\* *Unité de l'Espèce Humaine*. Paris, 1861.

† *Types of Mankind*. Philadelphia, 1857, p. 260.