nothing over the edge for many hundreds of feet. As Wali hewed the steps we advanced step by step after him, leaning back against the slope, all the time facing the precipice, and knowing that if we slipped (and the ice was very slippery, for the sun was just powerful enough to melt the surface of it), we should roll down the icy slope and over the precipice into eternity. After a time we reached terra firms in the shape of a projecting piece of rock, and from here began the descent of the cliff. We had to let ourselves down from any little ledge, taking every step with the greatest possible care, as the rock was not always sound; and once a shout came from above, and a huge rock, which had been dislodged, came crashing past me and as nearly as possible hit two of the men who had already got some way down. At the bottom of the cliff we came to another steep ice-slope." After eighteen hours of this task the party were glad to lie down for a few hours' rest. At daybreak next morning they were on their legs again, and after a few hours' travelling emerged on to the great Baltoro Glacier, which was explored by Colonel Godwin-Austen in 1852, when making the Kashmir survey. They travelled all that day, and for two days more, till they reached Askoli, a little village on the Braldo River, surrounded by trees and cultivated lands.

LIEUT. YOUNGHUSBAND remarked as follows on the Altai Mountains:-"These mountains are perfectly barren, the upper portion composed of bare rock and the lower of long gravel slopes formed of the debris of the rocks above. In such an extremely dry climate, exposed to the icy cold winds of winter and the fierce rays of the summer sun, and unprotected by one atom of soil, the rocks here, as also in every other part of the Gobi, crumble away to a remarkable extent, and there being no rainfall sufficient to wash away the debris, the lower features of the range gradually get covered with a mass of debris falling from the upper portions, and in the course of time a uniform slope is created, often 30 or 40 miles in length, and it is only for a few hundred feet at the top that the original jagged rocky outline is seen." Again, with regard to Chinese Turkistan:—"If you could get a bird's-eye view of Chinese Turkistan, you would see a great bare desert surrounded on three sides by barren mountains, and at their bases you would see some vivid green spots, showing out sharp and distinct like blots of green paint dropped on to a sepia picture. In the western end round Kashgar and Yarkand the cultivation is of greater extent and more continuous than in the eastern half, where the oases are small and separated from each other by 15 or 20 miles of desert. These oases are, however, extraordinarily fertile, every scrap of land that can be cultivated is used up, and every drop of water is drained off from the stream and used top arrigation." At the conclusion of Monday's meeting of the Royal Geographical Society, General J. T. Walker proposed, and Sir Henry Rawlinson seconded, that the peak in the Karatorum Henry Rawlinson seconded to the proposed of the control of t korum known as K2, 28,500 feet high, be baptized Mount Godwin-Austen—a proposal heartily approved by the meeting.

THE Paris Geographical Society has awarded gold medals to the Rev. P. Roblet, for his map of Madagascar; to MM. Bonvalot, Capus, and Pépin, for their journeys in Kasiristan and the Pamir; to M. Chassanjon, for his exploration of the sources of the Orinoco.

GENERAL PRJEVALSKY will start in August next on his fourth journey in Central Asia. His ultimate destination will be Lhassa, the capital of Tibet, and he will be equipped for two years' travel. He will be accompanied by an escort of twentyeight persons, including twelve Cossacks, and two scientific companions, Lieut. Robrowsky and Sub-Lieut. Koslow.

## THE PYGMY RACES OF MEN.1

LIKE all other human beings existing at present in the world, however low in the scale of civilization, the social life of the Andamanese is enveloped in a complex maze of unwritten law or custom, the intricacies of which are most difficult for any stranger to unravel. The relations they may or may not marry, the food they are obliged or forbidden to partake of at particular epochs of life or seasons of the year, the words and names they may or may not pronounce: all those, as well as their traditions, supersti-

<sup>1</sup> A Lecture delivered at the Royal Institution on Friday evening, April 13, 1888, by Prof. Flower, C.B., LL.D., F.R.S., Director of the Natural History Departments of the British Museum. Continued from p. 46.

tions, and beliefs, their occupations, games, and amusements of which they seem to have had no lack, would take far too long to describe here; but, before leaving these interesting people, I may quote an observation of Mr. Man's, which, unless he has seen them with too coulcur-de-rose eyesight, throws a very favourable light upon the primitive unsophisticated life of these poor little savages, now so ruthlessly broken into and destroyed by

the exigencies of our ever-extending Empire.

"It has been asserted," Mr. Man says, "that the 'communal marriage' system prevails among them, and that 'marriage is nothing more than taking a female slave'; but, so far from the contract being regarded as a merely temporary arrangement, to be set said or the will be set to be set as a set of the will be set of the said or the s to be set aside at the will of either party, no incompatibility of temper or other cause is allowed to dissolve the union; and while bigamy, polygamy, polyandry, and divorce are unknown, conjugal fidelity till death is not the exception but the rule, and matrimonial differences, which, however, occur but rarely, are easily settled with or without the intervention of friends. fact, Mr. Man goes on to say, "One of the most striking features of their social relations is the marked equality and affection which subsists between husband and wife," and "the consideration and respect with which women are treated might with advantage be emulated by certain classes in our own land."

It should also be mentioned that cannibalism and infanticide, two such common incidents of savage life, were never practised

by them.

We must now pass to the important scientific question, Who are the natives of the Andaman Islands, and where, among the other races of the human species, shall we look for their nearest

It is due mainly to the assiduous researches into all the documentary evidence relating to the inhabitants of Southern Asia and the Indian Archipelago, conducted through many years by M. de Quatrefages, in some cases with the assistance of his colleague M. Hamy, that the facts I am about to put before you have been prominently brought to light, and their significance demonstrated.

It is well known that the greater part of the large island of New Guinea, and of the chain of islands extending eastwards and southwards from it, including the Solomon Islands, the New Hebrides, and New Caledonia, and also the Fijis, are still inhabited mainly by people of dark colour, frizzly hair, and many characters allying them to the Negroes of Africa. These constitute the race to which the term Melanesian is commonly applied in this country, or Oceanic Negroes, the "Papouas" of Quatrefages. Their area at one time was more extensive than it is now, and has been greatly encroached upon by the brown, straight-haired Polynesian race with Malay affinities, now inhabiting many of the more important islands of the Pacific, and the mingling of which with the more aboriginal Melanesians in various proportions has been a cause, among others, of the diverse aspect of the population on many of the islands in this extensive region. These Papouas, or Melanesians, however, differ greatly from the Andamanese in many easily defined characters; which are, especially, their larger stature, their long, narrow, and high skulls, and their coarser and more Negro-like features. Although undoubtedly allied, we cannot look to them as the nearest relations of our little Andamanese.

When the Spaniards commenced the colonization of the Philippines, they met with, in the mountainous region in the interior of the Island of Luzon, besides the prevailing native population, consisting of Tagals of Malay origin, very small people, of black complexion, with the frizzly hair of the African Negroes. So struck were they with the resemblance, that they called them "Negritos del Monte" (little Negroes of the mountain). Their local name was Aigtas, or Inagtas, said to signify "black," and from which the word Aëta, generally now applied to them, is derived. These people have lately been studied by two French travellers, M. Marche and Dr. Montano; the result of their measurements gives 4 feet 8\frac{3}{4} inches as the average height of the men, and 4 feet 6\frac{1}{4} inches the average for the women. In many of their moral characteristics they accomble women. In many of their moral characteristics they resemble the Andamanese. The Aëtas are faithful to their marriage vows, and have but one wife. The affection of parents for vows, and have but one wife. The affection of parents of children is very strong, and the latter have for their father and mother as much love and respect. The marriage ceremony, according to M. Montano, is very remarkable. The affanced according to M. Montano, is very remarkable. The affianced pair climb two flexible trees placed near to each other. One of the elders of the tribe bends them towards each other.

their heads touch, the marriage is legally accomplished. A great fête, with much dancing, concludes the ceremony.

It was afterwards found that the same race existed in other parts of the archipelago, Panay, Mindanao, &c., and that they entirely peopled some little islands—among others, Bougas Island, or "Isla de los Negros."

As the islands of these eartern seas have become better

known, further discoveries of the existence of a small Negroid population have been made in Formosa, in the interior of Borneo, the Sandal Islands (Sumba), Xulla, Bourou, Ceram, Flores, Solor, Pantar, Lomblem, Ombay, the eastern peninsula of Celebes, &c. In fact, Sumatra and Java are the only large islands of this great area which contain no traces of them except some doubtful cross-breeds, and some remains of an industry which appears not to have passed beyond the Age of

The Sunda Islands form the southern limit of the Negrito area; Formosa, the last to the north, where the race has preserved all its characters. But beyond this, as in Lew-Chew, and even the south-east portion of Japan, it reveals its former existence by the traces it has left in the present population. That it has contributed considerably to form the population of New Guinea is unquestionable. In many parts of that great island, small round-headed tribes live more or less distinct from the larger and longer-headed people who make up the bulk of

the population.

But it is not only in the islands that the Negrito race dwelt. Traces of them are found also on the mainland of Asia, but everywhere under the same conditions: in scattered tribes, occupying the more inaccessible mountainous regions of countries otherwise mainly inhabited by other races, and generally in a condition more or less of degradation and barbarism, resulting from the oppression with which they have been treated by their invading conquerers; often, moreover, so much mixed that their original characters are scarcely recognizable. The Semangs of the interior of Malacca in the Malay peninsula, the Sakays from Perak, the Moys of Annam, all show traces of Negrito blood. In India proper, especially among the lowest and least civilized tribes, not only of the central and southern districts, but even almost to the foot of the Himalayas, in the Punjab, and even to the west side of the Indus, according to Quatrefages, frizzly hair, Negro features, and small stature, are so common that a strong argument can be based on them for the belief in a Negrito race forming the basis of the whole pre-Aryan, or Dravidian as it is generally called, population of the peninsula. peninsula. The crossing that has taken place with other races has doubtless greatly altered the physical characters of this people, and the evidences of this alteration manifest themselves in many ways; sometimes the curliness of the hair is lost by the admixture with smooth straight-haired races, while the black complexion and small stature remain; sometimes the stature is increased, but the colour which seems to be one of the most persistent of characteristics, remains.

The localities in which these people are found in their greatest purity, either in almost inaccessible islands, as on the Andamans, or elsewhere in the mountainous ranges of the interior only; their social positions and traditions, wherever they exist-all point to the fact that they were the earliest inhabitants; and that the Mongolian and Malay races on the east, and the Aryans on the west, which are now so rapidly exterminating and replacing them, are later comers into the land, exactly as, in the greater part of the Pacific Ocean, territory formerly occupied by the aboriginal dark, frizzly-haired Negroid Melanesians has been gradually and slowly invaded by the brown Polynesians, who in their turn, but

by a much more rapid process, are being replaced by Europeans. We now see what constitutes the great interest of the Andamanese natives to the student of the ethnological history of the Eastern world. Their long isolation has made them a remarkably homogeneous race, stamping them all with a common resemblance not seen in the mixed races generally met with in continental areas. For although, as with most savages, marriages within the family (using the term in a very wide sense) are most strictly forbidden, all such alliances have necessarily been confined to natives of the islands. They are the least modified representatives of the people who were, as far as we know, the primitive inhabitants of a large portion of the earth's surface, but who are now verging on extinction. It is, however, not necessary to suppose that the Andaman Islanders give us the exact characters and features of all the other branches of the race. Differences in detail doubtless existed—differences which

are almost always sure to arise whenever races become isolated from each other for long periods of time.

In many cases the characters of the ancient inhabitants of a land have been revealed to us by the preservation of their actual remains. Unfortunately we have as yet no such evidence to tell us of the former condition of man in Southern Asia. We may, how-ever, look upon the Andamanese, the Actas, and the Semangs, as living fossils; and by their aid conjecture the condition of the whole population of the land in ancient times. It is possible, also, to follow Quatrefages, and to see in them the origin of the stories of the Oriental pygmies related by Ctesias and by Pliny.

We now pass to the continent of Africa, in the interior of which the pygmies of Homer, Herodotus, and Aristotle have generally been placed. Africa, as is well known, is the home of another great branch of the black, frizzly-haired, or Ethiopian division of the human species, who do, or did till lately, occupy the southern two-thirds of this great continent, the northern third being inhabited by Hamite and Semite branches of the great white or Caucasian primary division of the human species, or by races resulting from the mixture of them and the Negroes. Besides the true Negro, there has long been known to exist in the southern part of the continent a curiously modified type, consisting of the Hottentots, and the Bushmen—Bosjesmen (men of the woods) of the Dutch colonists—the latter of whom, on account of their small size, come within the scope of the present subject. They lead the lives of the most degraded of savages, dwelling among the rocky and more inaccessible mountains of the interior, making habitations of the natural caves, subsisting entirely by the chase, being most expert in the use of the bow and arrow, and treated as enemies and outcasts by the surrounding and more civilized tribes, whose flocks and herds they show little respect for when other game is not within reach. The physical characters of these people are well known, as many specimens have been brought to Europe alive for the purpose of exhibition. Their hair shows the extreme of the frizzly type, being shorter and less abundant than that of the ordinary Negro; it has the appearance of growing in separate tufts, which coil up together into round balls compared to "peppercorns." The yellow complexion differs from that of the Negro, and, combined with the wide cheek-bones and form of the eyes, so much recalls that of certain of the pure yellow races that some anthropologists are inclined to trace true Mongolian affinities and admixture, although the extreme crispness of the hair makes such a supposition almost impossible. The width of the cheek-bones and the narrowness of the forehead and the chin give a lozenge shape to the front view of the face. The forehead is prominent and straight; the nose extremely flat and broad, more so than in any other race, and the lips prominent and thick, although the jaws are less prognathous than in the true Negro races. The cranium has many special characters by which it can be easily distinguished from that of any other. It has generally a very feminine, almost infantile, appearance, though the capacity of the cranial cavity is not the smallest, exceeding that of the Andamarese. In general form the cranium is rather oblong than oval, having straight sides, a flat top, and especially a vertical forehead, which rises straight from the root of the nose. It is moderately dolichocephalic or rather mesaticephalic, the average of the index of ten specimens being 75.4. The height is in all considerably less than the breadth, the average index being 71.1. The glabella and infra orbital ridges are little developed except in the oldest males. The malar bones project much forwards, and the space between the orbits is very wide and flat. The nasal bones are extremely small and depressed, and the aperture wide; the average nasal index being 60.8, so they are the most platyrhine of races.

With regard to the stature, we have not yet sufficient materials for giving a reliable average. Quatrefages, following Barrow, gives 4 feet 6 inches for the men, and 4 feet for the women, and speaks of one individual of the latter sex, who was the mother of several children, measuring only 3 feet 9 inches in height; but later observations (still, however, insufficient in number) give a rather larger stature: thus Topinard places the average at 1'404 metre, or 4 feet 71 inches; and Fritsch, who measured six male Bushmen in South Africa, found their mean height to be 1444 metre, or nearly 4 feet 9 inches. It is probable that, taking them all together, they differ but little in this respect from the Andamanese, although in colour, in form of head, in features, and in the proportions of the body, they are

widely removed from them.

There is every reason to believe that these Bushmen represent the earliest race of which we have, or are ever likely to have, any knowledge, which inhabited the southern portion of the African continent, but that long before the advent of Europeans upon the scene, they had been invaded from the north by Negro tribes, who, being superior in size, strength, and civilization, had taken possession of the greater part of their territories, and mingling freely with the aborigines, had produced the mixed race called Hottentots, who retained the culture and settled pastoral habits of the Negroes, with many of the physical features of the Bushmen. These, in their turn, encroached upon by the pure-bred Bantu Negroes from the north, and by the Dutch and English from the south, are now greatly diminished, and indeed threatened with the same fate that will surely soon befall the scanty remnant of the early inhabitants who still retain their primitive type.

At present the habitat of the Bushman race is confined to certain districts in the south-west of Africa, from the confines of the Cape Colony, as far north as the shores of Lake Ngami. Further to the north the great equatorial region of Africa is occupied by various Negro tribes, using the term in its broadest sense, but belonging to the divisions which, on account of peculiarities of language, have been grouped together as Bantu. They all present the common physical characteristics typical of the Negro race, only two of which need be specially mentioned here—medium or large stature, and dolichocephalic skull (àverage cranial index about 73.5).

It is at various scattered places in the midst of these, that the only other small people of which I shall have to speak, the veritable pygmies of Homer, Herodotus, and Aristotle, according

to Quatrefages, are still to be met with.1

The first notice of the occurrence of these in modern times is contained in "The strange adventures of Andrew Battell of Leigh in Essex, sent by the Portugals prisoner to Angola, who lived there, and in the adjoining regions near eighteen yeares" (1589 to 1607), published in "Purchas his Pilgrimes" (1625),

lib. vii. chap. iii. p. 983:—
"To the north-east of Mani-Kesock, are a kind of little people, called Matimbas; which are no bigger than Boyes of twelve eares old, but very thicke, and live only upon flesh, which they kill in the woods with their bows and darts. They pay tribute to Mani-Kesock, and bring all their elephants' teeth and tayles to him. They will not enter into any of the Maramba's houses, nor will suffer any to come where they dwell. And if by chance any Maramba or people of Longo pass where they dwell, they will forsake that place, and go to another. The women carry Bows and Arrows as well as the men. And one of these will walk in the woods alone and kill the Pongos with their poysoned Arrows.

Battell's narrative, it should be said, is generally admitted as having an air of veracity about it not always conspicuous in those of travellers of his time. In addition to the observations on the human inhabitants, it contains excellent descriptions of animals, as the pongo or gorilla, and the zebra, now well

known, but in his day new to Europeans.

Dapper, in a work called "Description de la Basse Ethiopie," published at Amsterdam in 1686, speaks of a race of dwarfs inhabiting the same region, which he calls Mimos or Bakke-Bakke, but nothing further was heard of these people until quite recent times. A German scientific expedition to Loango, the results of which were published in the Zeitschrift für Ethnologie, 1874, and in Hartmann's work, "Die Negritier," obtained, at Chinchoxo, photographs and descriptions of a dwarf tribe called "Baboukos, whose heads were proportionally large and of roundish form (cephalic index of skull, 78 to 81). One individual, supposed to be about forty years of age, measured 1 365 metre, rather under 4 feet 6 inches.

Dr. Touchard, in a "Notice sur le Gabon," published in the Revue Maritime et Coloniale for 1861, describes the recent destruction of a population established in the interior of this country and to which he gives the name of "Akoa." They seem to have been exterminated by the M'Pongos in their expansion towards the west. Some of them, however, remained as slaves at the time of the visit of Admiral Fleuriot de Langle, who in 1868 photographed one (measuring about 4 feet 6 inches high) and brought home some skulls, which were examined by Hamy, and all proved very small and sub-brachycephalic.

Another tribe, the M'Boulous, inhabiting the coast north of the Gaboon River, have been described by M. Marche as probably the primitive race of the country. They live in little villages, keeping entirely to themselves, though surrounded by the larger Negro tribes, M'Pongos and Bakalais, who are encroaching upon them so closely that their numbers are rapidly diminishing. In 1860 they were not more than 3000; in 1879 much less numerous. They are of an earthy-brown colour, and rarely exceed 1 600 metre in height (5 feet 3 inches). In the rich collections of skulls made by Mr. R. B. Walker and by M. Du Chaillu, from the coast of this region, are many which are remarkable for their small size and round form. Of many other notices of tribes of Negroes of diminutive size, living near the west coast of Equatorial Africa, I need only mention that of Du Chaillu, who gives an interesting account of his visit to an Obongo village in Ashango-land, between the Gaboon and the Congo; although unfortunately, owing to the extreme shyness and suspicion of the inhabitants, he was allowed little opportunity for anthropological observations. He succeeded, however, in measuring one man and six women; the height of the former was 4 feet 6 inches, the average of the later 4 feet 8 inches.

Far further into the interior, towards the centre of the region contained in the great bend of the Congo or Livingstone River, Stanley heard of a numerous and independent population of dwarfs, called "Watwas," who, like the Batimbas of Battell, are great hunters of elephants, and use poisoned arrows. One of these he met with at Ikondu was 4 feet  $6\frac{1}{2}$  inches high, and of a chocolate brown colour. More recently Dr. Wolff describes under the name of "Batouas" (perhaps the same as Stanley's Watwas), a people of lighter colour than other Negroes, and never exceeding 1'40 metres (4 feet 7 inches) high, but whose average is not more than 1'30 (4 feet 3 inches), who occupy isolated villages scattered through the territory of the Bahoubas,

with whom they never mix.3

Penetrating into the heart of Africa from the north-east, in 1870, Dr. George Schweinfurth first made us acquainted with a diminutive race of people who have since attained a considerable anthropological notoriety. They seem to go by two names in their own country, Akka and Tikki-tikki, the latter reminding us curiously of Dapper's Bakke-bakke, and the former, more singularly still, having been read by the learned Egyptologist, Mariette, by the side of the figure of a dwarf in one of the

monuments of the early Egyptian Empire.

It was at the court of Mounza, king of the Monbuttu, that Schweinfurth first met with the Akkas. They appear to live under the protection of that monarch, who had a regiment of them attached to his service, but their real country was further to the south and west, about 3° N. lat. and 25° E. long. From the accounts the traveller received they occupy a consider able territory, and are divided into nine distinct tribes, each having its own king or chief. Like all the other pygmy African tribes, they live chiefly by the chase, being great hunters of the

elephant, which they attack with bows and arrows.

In exchange for one of his dogs, Schweinfurth obtained from Mounza one of these little men, whom he intended to bring to Europe, but who died on the homeward journey at Berber. fortunately all the measurements and observations which were made in the Monbuttu country by Schweinfurth perished in the fire which destroyed so much of the valuable material he had His descriptions of their physical characters are therecollected. fore chiefly recollections. Other travellers—Long, Marno, and Vossion—though not penetrating as far as the Akka country, have given observations upon individuals of the race they have met with in their travels. The Italian Miani, following the footsteps of Schweinfurth into the Monbuttu country, also obtained, by barter, two Akka boys, with the view of bringing them to Europe. He himself fell a victim to the fatigues of the journey and climate, but left his collections, including the young Akkas, to the Italian Geographical Society. Probably no two individuals the Italian Geographical Society. Probably no two individuals of a savage race have been so much honoured by the attentions of the scientific world. First at Cairo, and afterwards in Italy, Tebo (or Thibaut) and Chairallah, as they were named, were described, measured, and photographed, and have been the subjects of a library of memoirs, their bibliographers including the names of Owen, Panceri, Cornalia, Mantegazza, Giglioli and Zannetti, Broca, Hamy, and de Quatrefages. On their arrival in Italy, they were presented to the King and Queen, introduced into the

<sup>&</sup>lt;sup>1</sup> The scattered information upon this subject was first collected together by Hamy in his "Essai de co-ordination des Matériaux récemment recueillis sur l'ethnologie des Négrilles ou Pygmées de l'Afrique équatoriale," Bull. Soc. d'Anthropologie de Paris, to ne i'. (ser. iii.), 1879, p. 73.

 <sup>&</sup>quot;A Journey to Ashango-land," 1867, p. 3 5.
 "Through the Dark Continent," vol. ii.
 La Gazette Géographique, 1887, p. 153, quoted by Quatrefages.

most fashionable society, and finally settled down as members of the household of Count Miniscalchi Erizzo, at Verona, where they received a European education, and performed the duties of

pages.

In reply to an inquiry addressed to my friend Dr. Giglioli, of consumption on January Florence, I hear that Thibaut died of consumption on January 28, 1883, being then about twenty-two years of age, and was buried in the cemetery at Verona. Unfortunately no scientific examination of the body was allowed, but whether Chairallah still lives or not I have not been able to learn. As Giglioli has not heard of his death, he presumes that he is still living in Count Miniscalchi's palace.

One other specimen of this race has been the subject of careful observation by European anthropologists-a girl named Saida, brought home by Romolo Gessi (Gordon's lieutenant), and who is still, or was lately, living at Trieste as servant to

M. de Gessi.

The various scattered observations hitherto made are obviously insufficient to deduce a mean height for the race, but the nearest estimate that Quatrefages could obtain is about 4 feet 7 inches for the men, and 4 feet 3 inches for the women, decidedly inferior, therefore, to the Andamanese. With regard to their other characters, their hair is of the most frizzly kind, their complexion lighter than that of most Negroes, but the prognathism, width of nose, and eversion of lips characteristic of the Ethiopian branch of the human family are carried to an extreme degree, especially if Schweinsurth's sketches can be trusted. The only essential point of difference from the ordinary Negro, except the size, is the tendency to shortening and breadth of the skull, although it by no means assumes the "almost spherical" shape attributed to it by Schweinfurth.

Some further information about the Akkas will be found in the work, just published, of the intrepid and accomplished traveller in whose welfare we are now so much interested, Dr. Emin Pasha, Gordon's last surviving officer in the Soudan, who in the course of his explorations spent some little time lately in the country of the Monbuttu. Here he not only met with living Akkas, one of whom he apparently still retains as a domestic in his service, and of whose dimensions he has sent me a most detailed account, but he also, by watching the spots where two of them had been interred, succeeded in obtaining their skeletons, which, with numerous other objects of great scientific interest, safely arrived at the British Museum in September of last year. I need hardly say that actual bones, clean, imperishable, easy to be measured and compared, not once only, but any number of times, furnish the most acceptable evidence that an anthropologist can possess of many of the most important physical characters of a race. There we have facts which can always be appealed to in support of statements and inferences based on them. Height, proportions of limbs, form of head, characters of the face even, are all more rigorously determined from the bones than they can be on the living person. Therefore the value of these remains, imperfect as they unfortunately are, and of course insufficient in number for the purpose of establishing

average characters, is very great indeed.

As I have entered fully into the question of their peculiarities elsewhere, I can only give now a few of the most important and most generally to be understood results of their examination. The first point of interest is their size. The two skeletons are both those of full-grown people, one a man, the other a woman. There is no reason to suppose that they were specially selected as exceptionally small; they were clearly the only ones which Emin had an opportunity of procuring; yet they fully bear out, more than bear out, all that has been said of the diminutive size of the race. Comparing the dimensions of the bones, one by one, with those of the numerous Andamanese that have passed through my hands, I find both of these Akkas smaller, not than the average, but smaller than the smallest; smaller also than any Bushman whose skeleton I am acquainted with, or whose dimensions have been published with scientific accuracy. In fact, they are both, for they are nearly of a size, the smallest normal human skeletons which I have seen, or of which I can find any record. I say normal, because they are thoroughly well grown and proportioned, without a trace of the deformity almost always associated with individual dwarfishness in a taller race. One only, that of the female, is sufficiently perfect for articulation. After due allowance for some missing vertebræ, and for the intervertebral spaces, the skeleton measures from the crown of the head to the ground exactly 4 feet, or 1'218 metre. About half an inch more for the thickness of the skin of the head and soles of the feet would complete the height when The other (male) skeleton was (judging by the length of the femur) about a quarter of an inch shorter.

The full-grown woman of whom Emin gives detailed dimensions is stated to be only 1.164 metre, or barely 3 feet 10 inches. These heights are all unquestionably less than anything that has been yet obtained based upon such indisputable One very interesting and almost unexpected result of a careful examination of these skeletons is that they conform in the relative proportions of the head, trunk, and limbs, not to dwarfs, but to full-sized people of other races, and they are therefore strikingly unlike the stumpy, long-bodied, short-limbed, large-headed pygmies so graphically represented fighting with their lances against the cranes on ancient Greek vases.

The other characters of these skeletons are Negroid to an intense degree, and quite accord with what has been stated of their external appearance. The form of the skull, too, has that sub-brachycephaly which has been shown by Hamy to characterize all the small Negro populations of Central Africa. It is quite unlike that of the Andamanese, quite unlike that of the Bushmen. They are obviously Negroes of a special type, to which Hamy has given the appropriate term of Negrillo. They seem to have much the same relation to the larger longer-headed African Negroes that the small round-headed Negritos of the Indian Ocean have to their larger longer-headed Melanesian

At all events, the fact now seems clearly demonstrated that at various spots across the great African continent, within a few degrees north and south of the equator, extending from the Atlantic coast to near the shores of the Albert Nyanza (30° E. long.), and perhaps, if some indications which time will not allow me to enter into now (but which will be found in the writings of Hamy and Quatrefages), even further to the east, south of the Galla land, are still surviving, in scattered districts, communities of these small Negroes, all much resembling each other in size, appearance, and habits, and dwelling mostly apart from their larger neighbours, by whom they are everywhere surrounded. Our information about them is still very scanty, and to obtain more would be a worthy object of ambition for the authropological traveller. In many parts, especially at the west, they are obviously holding their own with difficulty, if not actually disappearing, and there is much about their condition of civilization, and the situations in which they are found, to induce us to look upon them, as in the case of the Bushmen in the south and the Negritos in the east, as remains of a population which occupied the land before the in-coming of the present dominant races. If the account of the Nasamonians related by Herodotus is accepted as historical, the river they came to, "flowing from west to east," must have been the Niger, and the northward range of the dwarfish people far more extensive twenty-three centuries ago than it is at the present time.

This view opens a still larger question, and takes us back to the neighbourhood of the south of India as the centre from which the whole of the great Negro race spread, east over the African continent, and west over the islands of the Pacific, and to our little Andamanese fellow subjects as probably the least modified descendants of the primitive members of the great branch of the human species characterized by their black skins and frizzly hair.

## UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.-In a recent discussion on the proposed appropriation of the whole of the Botanic Gardens site for Natural science Departments, it seemed to be generally agreed that the Mechanical Department ought to be removed from a locality where it must cause vibrations injurious to microscopical or physical research. The suggested removal of the Herbarium to the Botanic Gardens was disapproved of by the Professor and his Assistant-Curator. The proposed appropriation of the present Chemical Rooms for Pathology was generally approved. Mr. J. W. Clark emphatically condemned the present Museum of Human Anatomy and Surgery as a discredit to the University. Prof. Hughes further put in a claim that the Geological Museum should extend to the extreme east of the site, and that the erection of the buildings should be begun at once.

In his letters Emin speaks of an Akka man as "3 feet 6 inches" high, though this does not profess to be a scientifically accurate observation, as does the above. He says of this man that his whole body was covered by thick, stiff hair, almost like felt, as was the case with all the Akkas he had yet examined