

A MALE AND FEMALE DWARF FROM THE SEMLIKI FOREST.



# THE UGANDA PROTECTORATE

AN ATTEMPT TO GIVE SOME DESCRIPTION OF THE PHYSICAL  
GEOGRAPHY, BOTANY, ZOOLOGY, ANTHROPOLOGY, LANGUAGES  
AND HISTORY OF THE TERRITORIES UNDER BRITISH PROTECTION  
IN EAST CENTRAL AFRICA, BETWEEN THE CONGO FREE STATE  
AND THE RIFT VALLEY AND BETWEEN THE FIRST DEGREE OF  
SOUTH LATITUDE AND THE FIFTH DEGREE OF NORTH LATITUDE

BY

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etc., etc.*

IN TWO VOLS.

WITH

506 ILLUSTRATIONS FROM DRAWINGS AND PHOTOGRAPHS  
BY THE AUTHOR AND OTHERS

48 FULL-PAGE COLOURED PLATES BY THE AUTHOR

AND

9 MAPS BY J. G. BARTHOLOMEW AND THE AUTHOR

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# THE UGANDA PROTECTORATE

## CHAPTER XIII

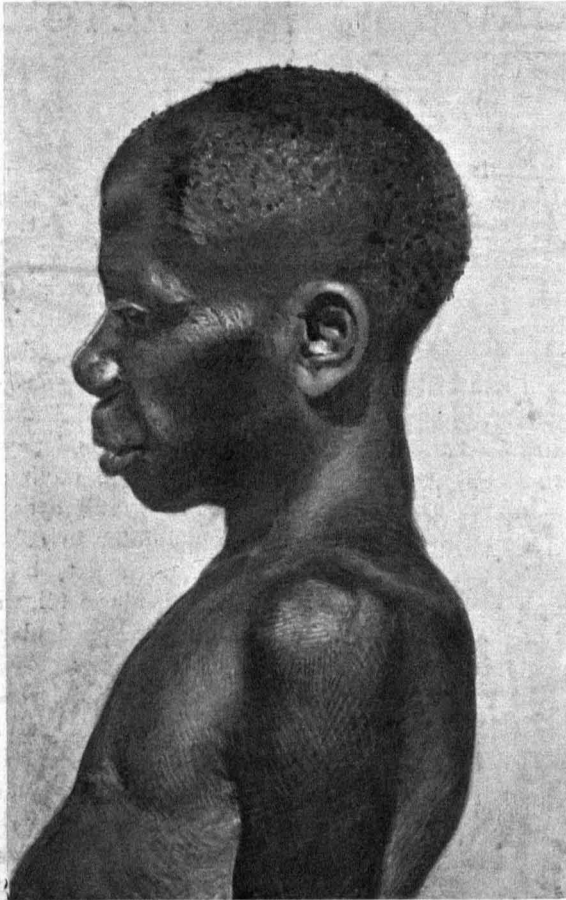
### ANTHROPOLOGY

ALL the researches made into the natural history of the human race practically result in our agreeing to recognise three main types, which here and there have interbred and produced hybrid peoples difficult to classify. These types are the yellow-skinned Mongolian, with narrow eyes, high cheek-bones, narrow, flattened nose, a tendency to paucity of hair on the face and body and, on the contrary, to long and coarse hair on the head (Mongolians, Chinese, Malays, Polynesians, and American Indians); a brown or white Caucasian type, with a distinct tendency to be hairy about the face and body, with head-hair long though inclined to be curly and usually fine of texture, of handsome features, full eyes, straight well-developed nose; and the Negro type, never lighter in colour than dark yellow, and strongly inclining to be black, with flat, bridgeless, wide-winged nose, high cheek-bones, poor chin, and, above all, with head- and body-hair closely curled, woolly, and differing in this particular sharply from the Caucasian and Mongolian races of men.\*

The Negro race certainly originated in Southern Asia, possibly in India, not far from the very centre where man himself emerged in some form similar to the *Pithecanthropos erectus* from a branch of the anthropoid apes. Perhaps on the whole the Negro retains more simian characteristics than any other existing type of humanity. On the other hand, some of his peculiarities depart from the simian, and would indicate a line of development on his own account, possibly somewhat on the down-grade. As regards hairiness of body, the European and Asiatic races belonging to the Caucasian type come much nearer to the anthropoid apes than does the Negro, though all Negroes perhaps exhibit more body-hair in a natural state than is usually supposed to be the case, it being a widespread custom throughout most Negro tribes (except the most degraded) to remove by artificial means the hair on face and body. The crimped or woolly

\* There are anatomical details in which the Negro approximates more to the white race than to the Mongolian.

appearance of Negro hair is not, of course, an ape-like characteristic; indeed, the anthropoid apes have head-hair more resembling in appearance that of the Mongolian type of humanity, though in some chimpanzees I have noticed a tendency to wavy, "crimped" hair. In the shape of the skull,



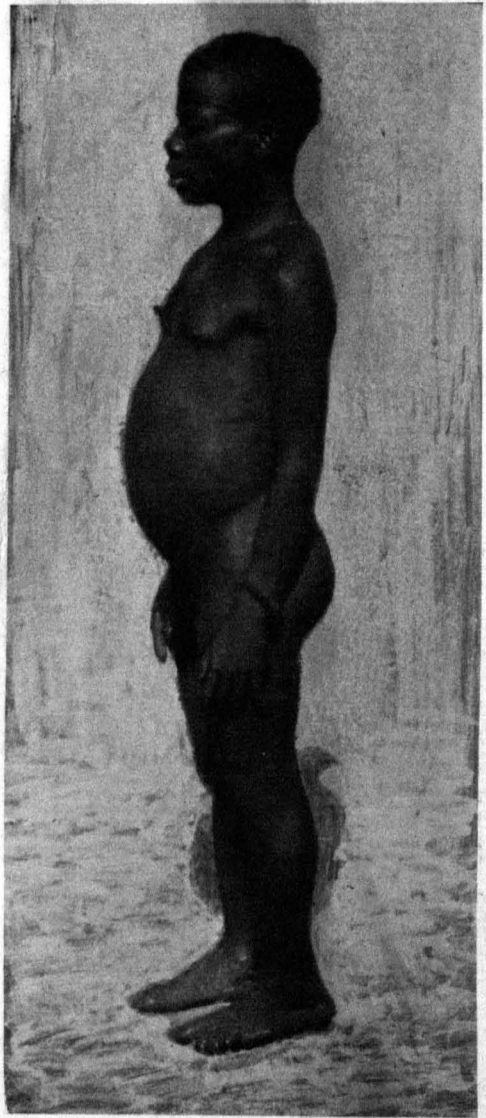
254. A PYGMY OF THE CONGO FOREST

in the foot, in the relative proportion of the limbs, the Negro species (which, it must be remembered, includes the ancient inhabitants of Tasmania, the Negritoes and Papuans of Eastern Asia and Polynesia) is less divergent from the ape than other living races of mankind.

The Negro type which originated in Southern Asia was possibly of an under-sized appearance, his skin, however, being rather yellower than black.

He must have wandered across the peninsula of Arabia, following, no doubt, the anthropoid apes which preceded him along the same route (Arabia then being well watered and covered with vegetation) into Eastern Africa, and in all probability he made his first permanent home within the limits of the Uganda Protectorate. In Arabia he either mingled with the Caucasian race from the north, or himself evolved a nobler and handsomer type. In one or other way arose the Hamite,\* that negroid race which was the main stock of the ancient Egyptian, and is represented at the present day by the Somali, the Gala, and some of the blood of Abyssinia and of Nubia, and perhaps by the peoples of the Sahara Desert.

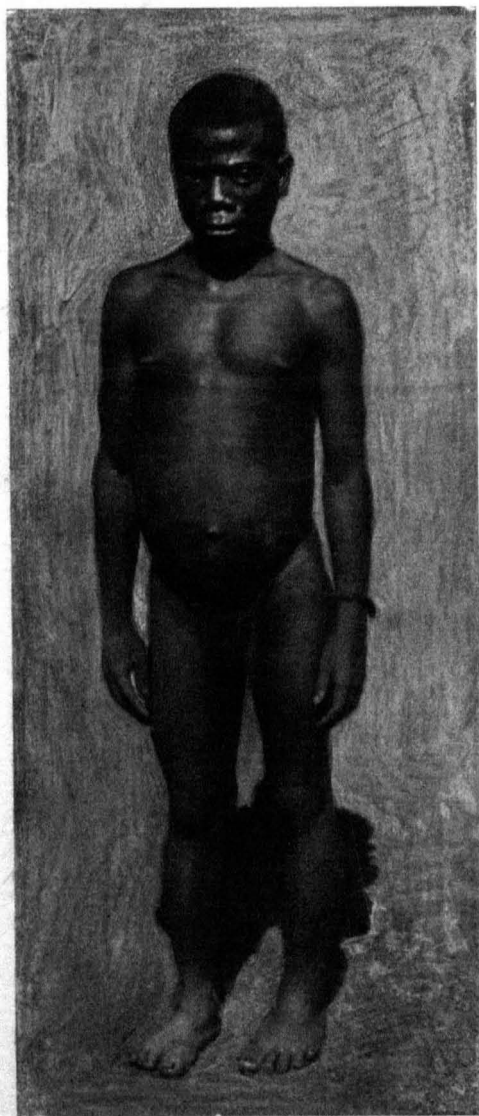
The Negro who first reached Uganda was an ugly dwarfish creature of ape-like appearance, very similar, I fancy, to the Pygmy-Prognathous type which lingers at the present day in the forests of Western and Central Africa. From some such stock as this, which is the underlying stratum of all Negro races, may have arisen, in Somaliland, perhaps, the ancestors of the Bushmen-Hottentot group, which found its way down through Eastern Africa to Africa south



255. A PYGMY OF THE CONGO FOREST

of the Zambezi, in the western parts of which Bushmen and Hottentots still linger. Then developed the high-cheek-boned, tall, thin-legged Negro of the Sudan, and the blubber-lipped, coarse-featured, black-skinned Negro

\* And from this possibly the Arab or Semitic type.



256. A PYGMY OF THE CONGO FOREST

of the West African coast-lands, and later the Bantu type, which is little else than the West African Negro tinged in varying degrees with the results of Hamitic intermixture (the Hamites being either a half-way stage in the evolution of a white man\* from the Negro, or an invasion from Asia of a Caucasian people which ages ago mixed considerably with Negroes till it had acquired very marked negroid characteristics).

At the present day the negro and negroid inhabitants indigenous to the Uganda Protectorate may for general purposes be divided into five races or types, these divisions and groupings being based mainly on measurements of the body and other physical characteristics, though to some extent they are also supported by community of habits and customs, and even relationships in language. I am fully aware that language is often a misleading guide in anthropological classification. A Negro may be found speaking an Aryan language or a member of the white race may have adopted a form of speech usually associated with Mongolian men. Still, I should say that in about six cases out of ten, especially in the minor divisions of human-

ity, community of language accompanies physical characteristics held

\* I write advisedly "a" white man, because white races may have arisen twice or thrice or four times independently from Mongol, Negro, and the Neanderthal-Australoid type.

in common. Thus Dr. Shrubsall, in analysing my anthropometrical observations, has discovered an interesting fact in regard to the two sections of the Kavirondo people who dwell in the Central and Eastern Provinces of the Uganda Protectorate. For some time past it has been observed that one section of the Kavirondo people spoke a language which was practically identical with the Nilotic Acholi tongue, while the other folk in the Kavirondo country used Bantu dialects, the languages of the two sections being as far apart as English and Turkish. Now in all the Kavirondo people speaking a Nilotic language, Dr. Shrubsall has found that

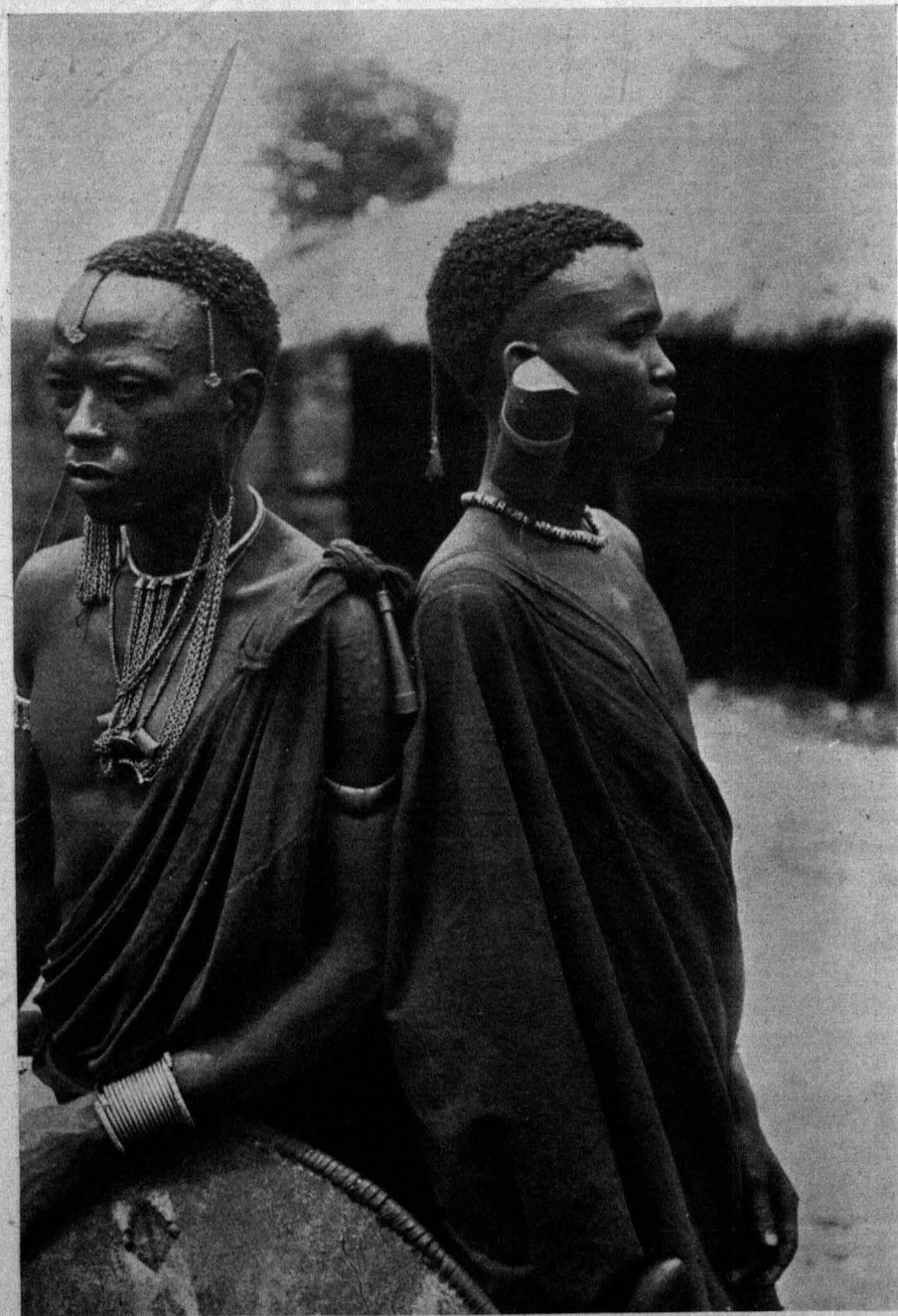


257. NATIVES OF WESTERN SLOPES OF MOUNT ELGON (BAGESU)

the physical characteristics were those of the Acholi people, living 200 or 300 miles distant in the Nile Province; whereas the measurements of the Bantu-speaking Kavirondo classed that people with the general Bantu type of the southern half of Africa. On the other hand, we have the Bahima, a race which physically is most closely allied to the Somali, the Gala, and the ancient Egyptian—all of which peoples spoke what we call Hamitic languages—using at the present day the Bantu dialect of Unyoro, a language closely related to the tongue of Uganda, and belonging to a group of tongues usually associated with a Negro people.

The five main stocks from which the elements of the native races in





258. ANDOROBO OF THE RIFT VALLEY

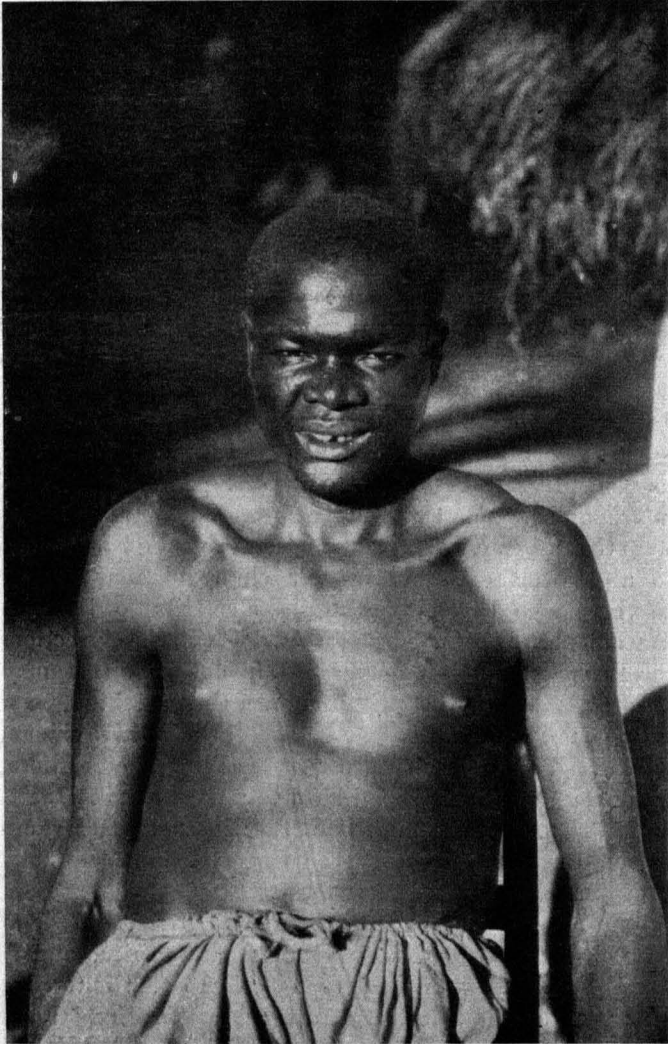
Uganda are derived are the following: (1) The Pygmy-Prognathous type; (2) the Bantu; (3) the Nile Negro; (4) the Masai; (5) the Hamite.

The "Pygmy-Prognathous" type would include not only the Dwarf races of the Congo and other Central African forests and the Dwarf element met with in other parts of Uganda, on Mount Elgon, among the Andorobo,\* and perhaps the Doko tribe of Lake Stephanie, but also those people of normal height which are found on the fringe of the Congo Forest from the Semliki River to the vicinity of Lake Kivu. This was the pariah race of Banande which Messrs. Grogan and Sharp and the author of this book have been instinctively and independently compelled to call "ape-like" from their strange, wild, degraded appearance and furtive habits. An examination of the measurements made of this supposed ape-like people, however, and a criticism of the photographs taken of them, does not establish the existence in them of any feature that is exceptionally simian, more than is the case with many other Negro types; but there seems to be sufficient community of physical features between them and the Pygmies to enable one to class them together, and as prognathism is a marked feature in these ape-like individuals, I propose to class them with the Congo Pygmies as the "Pygmy-Prognathous" group. It might perhaps be stated briefly here (though the question will be discussed at greater length in the next chapter) that after careful consideration the author of this book is not inclined to assert the existence of any close relationship between the Pygmies of the Congo Forest and the Bushmen tribes of South Africa. As often occurs amongst the Congo Pygmies, individuals or sections of tribes amongst the Bushmen not infrequently attain a height that may be called normal. A great many of the primitive races of mankind, no doubt, who are struggling under the disadvantages of their environment develop dwarfed or stunted forms, but in all probability the earliest types of humanity when emerging from ape-like creatures were not Dwarfs from our point of view. Therefore, the mere fact that most of the Pygmies and the majority of the Bushmen are below the normal height does not necessarily establish a direct relationship between them.

This Pygmy-Prognathous element forms, I am convinced, an element more or less obvious in the Negro population of Africa, and it probably resembles pretty closely the original type of Negro that entered the African continent from Arabia and India. Just as in our European population there crop up from time to time Neanderthaloid and Mongolian types, reminiscences of and reversions to some earlier stocks which peopled Europe, so the Pygmy-Prognathous type may show itself in most parts of

\* The Pygmy element in the Andorobo and some other East African tribes may be due to a "Bushman-Hottentot" stock rather than to the differently featured Congo Pygmy.

Negro Africa among races in which the normal individual belongs to a much handsomer example of the Negro race. But in some parts of the



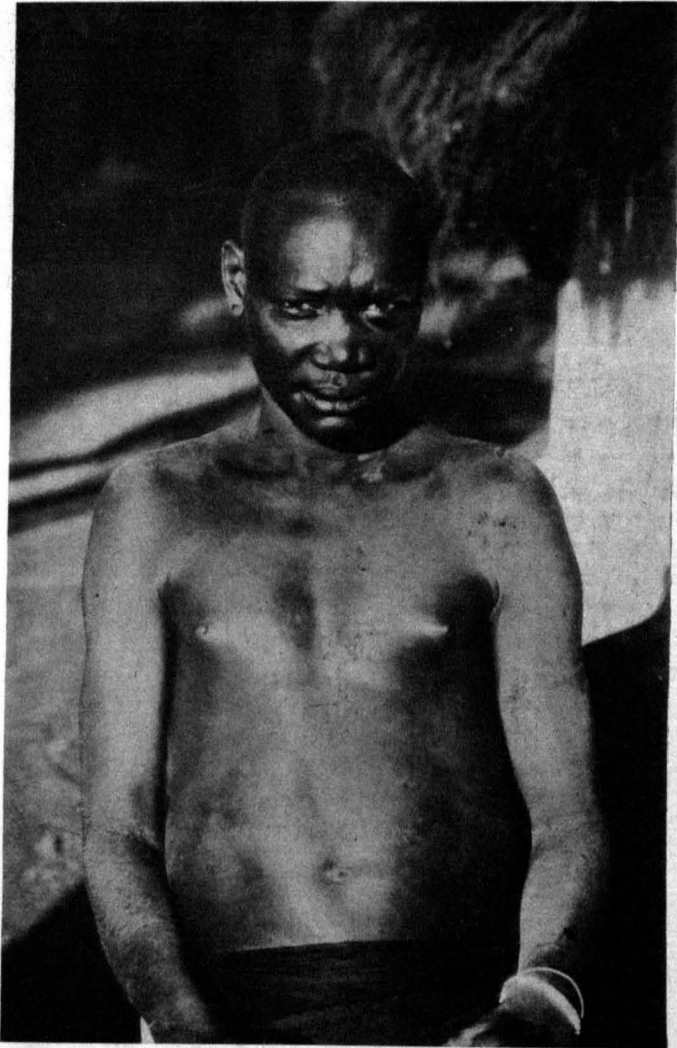
259. A BANTU NEGRO (MNYAMWEZI)

Uganda Protectorate, as in the Congo basin and jungle districts of West Africa,\* the Pygmy-Prognathous type is so marked and of such frequent

\* Dr. Robinson in his travels through Hausaland remarks on the very ape-like appearance of the wild mountain tribes in the Bauchi country, north of the River Benue.



occurrence as to suggest that these regions have only been partially overrun by later invasions of superior Negro types. This is the case in



260. A BANTU NEGRO (MNYAMWEZI)

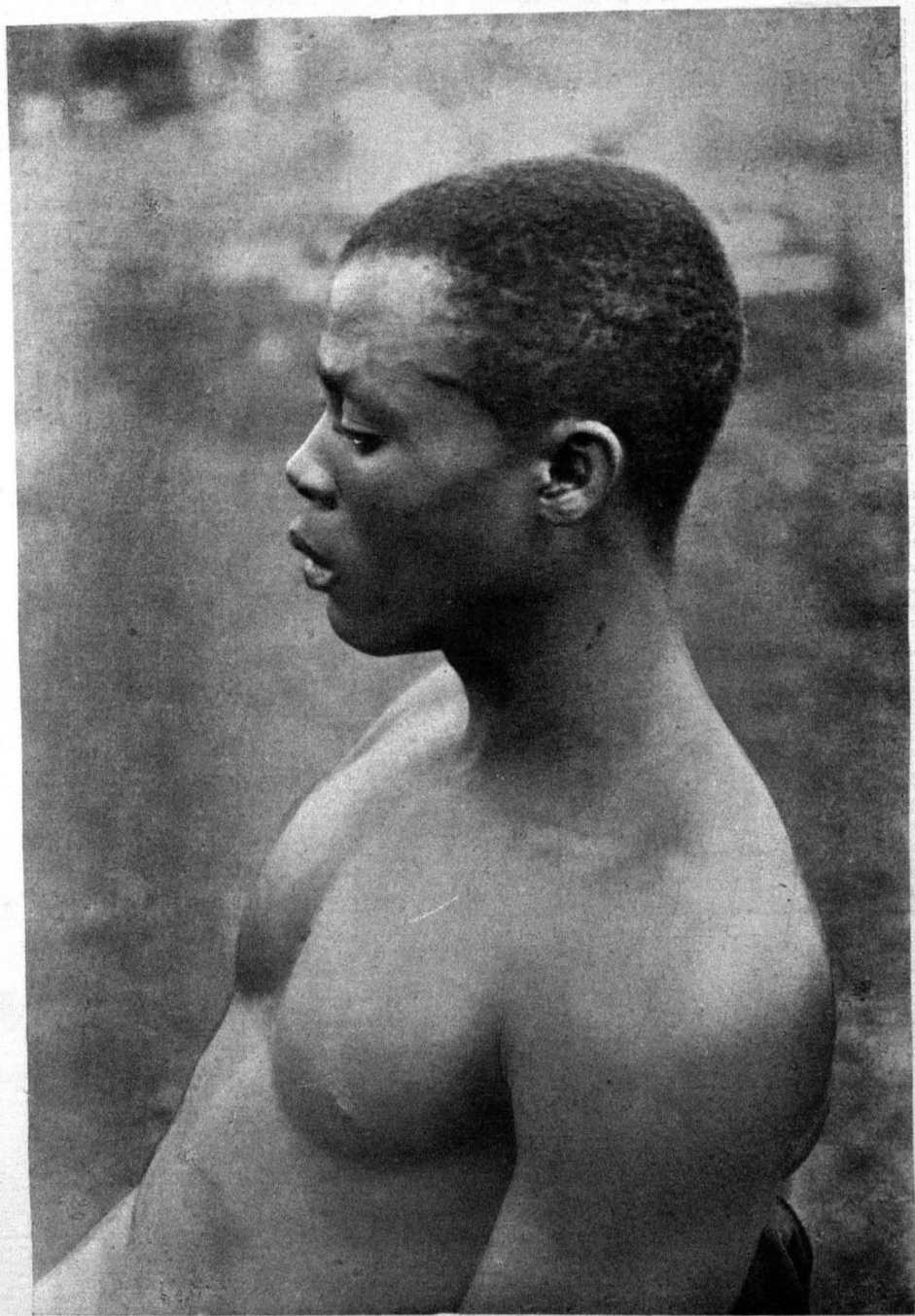
Uganda as regards the population on the western flanks of Mount Elgon, in the Kiagwe Forest, here and there among the Andorobo, and in the Semliki Valley and on the western slopes of Ruwenzori. According to this evidence, and also to native tradition, it would seem as though the first

Stanley, amongst others, for some reason difficult to understand, set himself with such vehemence some years ago to denounce the use of the term "Bantu" and to deny that there was any homogeneous Negro type which could be divided off from the other Negro families under that designation, that many writers on Africa lost courage, and although it was impossible, in deference to the wishes of Stanley and others, to give up the use of the word "Bantu" as representing the most clearly marked and homogeneous division of African languages, the use of the same word to describe a type of Negro like the Zulu Kaffir, native of the Congo, or of South Central Africa was abandoned.

Recently, however, owing to the researches of Dr. Shrubsall,\* who has examined a large number of skulls of Bantu Negroes and has compared them with other sections of the Negro race, such as the people of Ashanti (as representing a West African type), the Nile Negroes, and the Masai, I have come to the conclusion that amongst most of the Negroes who speak Bantu languages there are more physical characteristics shared in common (between, say, the Muganda and the Zulu, the native of Angola and of Nyasaland), than is the case between any of these people and the folk of West Africa and the Upper Nile. I am therefore encouraged once more to speak of the Bantu type as a physical distinction as well as applying to that sharply defined family of languages. Dr. Shrubsall considers that the average Bantu represents a Negro stock like that of the west coast of Africa, which has received more or less intermingling with negroid races who have invaded the southern half of Africa in ancient and modern times from various points between Somaliland on the east and Senegal on the west. It is probable, however, that the Hamitic intermixture with the full-blooded Negro which has created the modern Bantu type has come almost entirely from the northern parts of the Uganda Protectorate, though it may have penetrated due west to the vicinity of the Cross River (Old Calabar) and south to Zululand. Every now and then there are specimens in average Bantu tribes who resemble Congo Dwarfs, others who are hardly to be told from the most exaggerated type of West African on the coast of Guinea, while others, again, have the clear-cut profile, the finely developed nose and European features of the Hamite. The average Bantu, however, resembles very much the picture which I give here of a Bantu Kavirondo from the Nzoia River.

The third element in the Uganda population is the Nilotic Negro. This is a tall type of man with long legs but poorly developed calves, rather prominent cheek-bones, but not as a rule a repulsive physiognomy or a great degree of prognathism. The Nile Negro constitutes the bulk of the population in the valley of the White Nile from Lake Albert Nyanza

\* Of St. Bartholomew's Hospital and the Anthropological Institute.



263. A GOOD-LOOKING TYPE OF BANTU : A NATIVE OF KAVIRONDO (KAKUMEGA)



264. ACHOLI NILE NEGROES

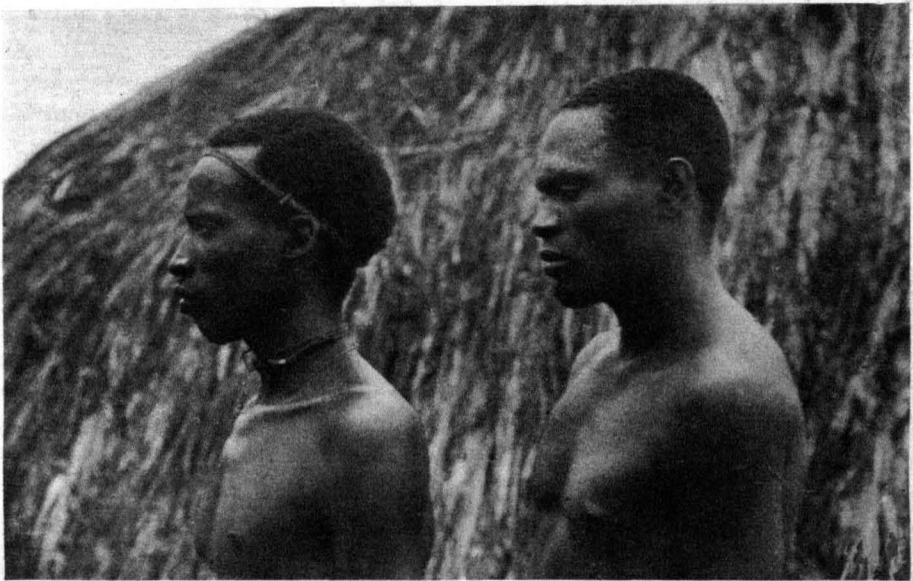
down to within a couple of hundred miles of Khartum, and from the western slopes of the Abyssinian Plateau across the Bahral-Ghazal to Wadelai and Lake Chad. The type may even extend through Hausaland towards Senegambia.\* Here and there, of course, there has been intermixture, ancient or recent, with Hamites, and consequently the result may be an improvement in physical beauty; or there has been mingling with the Pygmy-Prognathous, or the West African, Negro, or the Bantu. From these crosses arise tribes like the Nyam-Nyam, the Lendu, and the Madi. This Nilotic Negro type penetrates south-eastwards into the Uganda Protectorate, and has left an isolated colony in the countries round Kavirondo Bay.

The fourth of these racial divisions is the Masai, a section which stands very much apart from other Negro races. Perhaps on the whole its physical appearance may be explained by an ancient intermixture between the Hamite and Negro, followed by a period of isolation which caused the Masai to develop special features of their own. Related to the Masai are the Suk-Turkana—the tall, almost gigantic tribes that dwell between Lake Baringo and the north-west of Lake Rudolf—and the Nandi-Lumbwa, with their offshoot, the somewhat mongrel tribe of Andorobo.

The fifth and last amongst these main stocks is the Hamitic, which

\* Many of the Hausa and of the Kanuri (Bornu) are strikingly like the Nile Negroes in appearance.

is negroid rather than Negro. This is the division of African peoples to which the modern Somali and Gala belong, and of which the basis of the population of ancient Egypt consisted. These Hamites are represented by the remarkable Bahima aristocracy of the western portions of the Uganda Protectorate, and possibly by certain tribes at the north end and on the east coast of Lake Rudolf. Of course the Bahima of Western Uganda have mingled to some extent with the Negro races amongst whom they dwell, and the descendants of these unions have influenced the modern type with Negro characteristics that are slightly more marked than is the



265. HIMA AND BANTU

(1) Hima of Ankole. (2) Muir of Ankole.

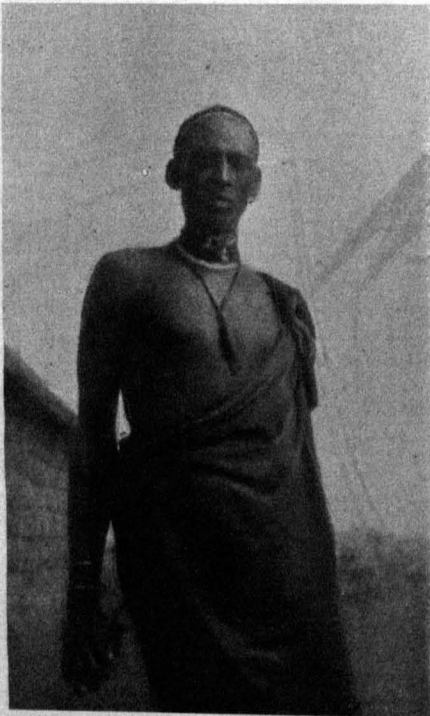
case amongst the Somali or the ancient Egyptians. The head-hair of the Bahima is often quite woolly, though it may grow longer than it would in purely Negro races. Yet there are individuals among the Bahima who, woolly hair notwithstanding, are nearer to the Egyptian type in their facial features and in the paleness of their skins than is the case even amongst Gala and Somali. If deductions from native tradition and legend are trustworthy to any extent, the Bahima entered what is now the Uganda Protectorate from the north-east between two and three thousand years ago, remaining for several centuries in the Lango (Acholi) countries east of the Victoria Nile. But the ancestors of the Bahima were probably only the last in a series of Hamitic invaders of Negro



Africa. Yet, though in this way superior races coming from the more arid countries of Southern Abyssinia and Galaland have continually leavened the mass of ugly Negroes pullulating in the richly endowed countries between and around the Nile lakes, it is very doubtful whether the ancient Egyptians ever penetrated directly up the Nile beyond the vicinity of Fashoda, or had any direct intercourse with Uganda (though their traders may have gone south-westward towards the Bahr-al-Ghazal). Rather it would seem as though ancient Egypt traded and communicated directly with what is now Abyssinia and the Land of Punt (Somaliland), and that the Hamitic peoples of these countries facing the Red Sea and Indian Ocean carried a small measure of Egyptian culture into the lands about the Nile lakes. In this way, and through Uganda as a half-way house, the totally savage Negro received his knowledge of smelting and working iron, all his domestic animals and cultivated plants (except those, of-course, subsequently introduced by Arabs from Asia and Portuguese from America), all his musical instruments higher in development than the single bowstring and the resonant hollowed log, and, in short, all the civilisation he possessed before the coming of the white man—Moslem

or Christian—1,000 years ago. The establishment by sea of gold-working colonies of South Arabians in Southern Zambezia, that commenced to take place perhaps 2,500 years ago, introduced a local civilisation which did not spread to any appreciable extent, perhaps because it was planted among brutish Hottentots and apish Bushmen. These Sabæan colonies in South-Eastern Africa were finally swamped between the fifth and seventh centuries of the present era by the Bantu—at any rate by the Zulu—invasion of Southern Africa. Their influence, from whatever cause,\*

\* Perhaps because the trend of Negro and negroid migrations and race movements has always been—with only two well-known exceptions—the eastward march of the Fulahs and the northward raids of the Zulus—from north to south and from east to west, and it would be difficult for foreign influence to travel against the current.



256. A MUHIMA OF MPÓROKO



was singularly restricted and fruitless, and died out, leaving no permanent legacy of religious beliefs, arts, and industries, domestic animals, or cultivated plants among the Negro races.

The Negro, in short, owes what little culture he possessed, before the advent of the Moslem Arab and the Christian white man, to the civilising influence of ancient Egypt; but this influence (except a small branch of it in the Bahr-al-Ghazal) travelled to him, not directly up the White Nile,\* but indirectly, through Abyssinia and Somaliland; and Hamites, such as the stock from which the Gala and Somali sprang, were the middlemen whose early traffic between the Land of Punt and the countries round the Victoria Nyanza was the main, almost the sole, agency by which the Negro learnt the industries and received the domestic animals of Egypt, and by which the world outside tropical Africa first heard of the equatorial lakes and snow mountains.

## REMARKS ON THE ANTHROPOMETRIC OBSERVATIONS

MADE BY

SIR HARRY JOHNSTON AND MR. DOGGETT;

WITH THE SAID OBSERVATIONS REDUCED TO TABULAR AND COMPARATIVE FORM

By FRANK C. SHRUBSALL, M.B., M.B.C.P.,

FELLOW OF THE ANTHROPOLOGICAL INSTITUTE.

THE anthropometric observations fall naturally into two groups, dealing with the proportions of the head and body respectively.

The measurements of the cranium taken comprise the maximum length and breadth and the vertical projection from the vertex to the tragus of the ear. These enable an estimate to be formed of the size and shape of the head proper. The table of measurements appended shows that the largest individual heads are to be met among the Masai, Karamojo, and Bahima, the smallest among the Acholi and the Congo Dwarf people. By adding together the three dimensions, length, breadth, and height, and dividing by three, a number known as a modulus is obtained, which expresses the average dimension, and the volume is found to vary proportionately with this. From this it would appear that the Lendu have the smallest and the Masai the largest skulls in the series examined. Greater interest attaches to the relative proportions of the different dimensions, and especially to the cephalic index, obtained by multiplying the maximum breadth by 100 and dividing by the maximum length; a similar index is also constructed to show the relation of the length and height. The average results for this series are shown in the table appended. The longest, most dolichocephalic head, occurs among the Lendu (index 69), the broadest among the Sük (index 84). The index numbers are divided into groups, heads with an index of 75 or under being known as dolichocephalic, those between 75 and 80 as mesaticephalic, and those of 80

\* Doubtless because the Nile of Uganda in those days created vast, untraversable swamps between Fashoda and the fourth degree of north latitude.



and over as brachycephalic. The distribution of the series now under examination in these groups is as follows:—

TRIBE.	DOLICHOCEPHALIC.	MESATICEPHALIC.	BRACHYCEPHALIC.
Banande . . . . .	—	—	2
Bambute . . . . .	1	4	3
Baamba . . . . .	—	1	1
Baganda . . . . .	7	1	—
Basoga . . . . .	2	2	—
Bahima . . . . .	4	1	—
Wanyamwezi . . . . .	2	4	—
Swahili . . . . .	1	—	—
Kavirondo, Bantu speech .	1	2	1
Kavirondo, Ja-luo speech .	—	4	—
Acholi, Bari, Aluru . . .	2	3	1
Lendu . . . . .	2	4	—
Karamojo . . . . .	4	1	—
Suk . . . . .	5	4	1
Masai . . . . .	6	2	—
Andorobo . . . . .	3	8	—
Kamasia . . . . .	1	3	1
Nandi . . . . .	5	2	—

These results may be usefully compared with Count Schweinitz's (1) observations on living natives of German East Africa, and with Mense's (2) studies of the people of the Middle Congo, expressed in similar tabular form below.

1. "Zeitschrift für Ethnologie," 1893.

2. " " " " 1887.

TRIBE.	DOLICHOCEPHALIC.	MESATICEPHALIC.	BRACHYCEPHALIC.
<i>East Africa.</i>			
Wagogo . . . . .	7	6	—
Wangoni . . . . .	9	5	2
Wanyema . . . . .	4	2	2
Wanyamwezi . . . . .	3	1	1
Watusi . . . . .	2	2	—
Wasukuma . . . . .	3	7	—
Wasinja . . . . .	7	4	—
Wasiba . . . . .	5	2	—
	<u>40</u>	<u>29</u>	<u>5</u>
<i>Congo.</i>			
Bateke . . . . .	30	16	—
Bayansi . . . . .	6	8	2
Bakongo . . . . .	8	4	—
Bangala . . . . .	10	5	—
Balali . . . . .	3	1	—
	<u>57</u>	<u>34</u>	<u>2</u>
<i>Bantu Crania</i> (Shrubsall)	90	30	1
<i>Masai Crania</i> (Virchow)	13	3	—

From these tables uniformity rather than diversity of head form would seem to be the great characteristic of the African black races, while a broad-headed element can be seen to affect the population of the Nile Valley and forest zone.

Turning from the cranial to the facial skeleton, a greater range of variation becomes apparent.

A similar tabulation of the length-height index is subjoined.

TRIBE.	CHAMECEPHALIC. (Under 60.)	ORTHOCEPHALIC. (60·1—65.)	HYPSICEPHALIC. (65·1—70.)	HYPERHYPSICEPHALIC. (70·1 and over.)
Banande . . . . .	—	—	1	1
Bambute . . . . .	—	1	5	2

TRIBE.	CHAMÆCEPHALIC. (Under 60.)	ORTHOCEPHALIC. (60·1—65.)	HYPSICEPHALIC. (65·1—70.)	HYPERHYPSICEPHALIC. (70·1 and over.)
Baamba . . . . .	—	—	1	1
Baganda . . . . .	—	1	6	1
Basoga . . . . .	—	—	3	1
Wanyamwezi . . . . .	1	2	2	2
Bahima . . . . .	—	3	2	—
Kavirondo, Bantu speech . . . . .	—	—	3	1
Kavirondo, Ja-luo speech . . . . .	—	—	—	4
Aluru, Acholi, Bari . . . . .	—	2	1	3
Lendu . . . . .	1	3	2	1
Karamojo . . . . .	1	1	3	—
Sūk . . . . .	—	3	3	2
Masai . . . . .	—	3	4	1
Andorobo . . . . .	—	1	3	7
Kamásia . . . . .	—	1	3	1
Nandi . . . . .	1	—	3	3
compared with Schweinitz :				
Wagogo . . . . .	3	4	6	—
Wangoni . . . . .	3	9	3	1
Wanyema . . . . .	2	2	3	1
Wanyamwezi . . . . .	4	—	—	1
Watusi . . . . .	2	2	—	—
Wasukuma . . . . .	3	6	1	—
Wasinja . . . . .	—	5	4	1
Wasiba . . . . .	—	5	2	—

Considerable importance in anthropometry is attached to a study of the nose. This is described as being negroid (Form No. 7 of Table in *Notes and Queries*), broad and flat, with prominent alæ in all the series examined save the Masai and the Bahima, among whom it is more prominent and more arched.

The various measurements are most easily contrasted by means of the nasal index obtained by dividing the nasal breadth between the alæ, by the height from the root of the nose to the septum, and multiplying the quotient by 100. This index also may be divided into groups, and the distribution among them of the individuals examined during Sir H. H. Johnston's travels is as follows :—

TRIBE.	LEPTORHINE. (under 69·4.)	MESORHINE. (69·5—81·4.)	PLATYRHINE. (81·5—87·8.)	HYPER- PLATYRHINE. (87·9—108·9.)	ULTRA- PLATYRHINE. (109 and over.)
Banande . . . . .	—	—	—	1	1
Bambute . . . . .	—	—	1	4	3
Baamba . . . . .	—	—	2	—	—
Baganda . . . . .	—	—	—	7	1
Basoga . . . . .	—	—	1	3	1
Wanyamwezi . . . . .	—	—	—	5	2
Bahima . . . . .	—	3	—	1	1
Kavirondo, Bantu speech . . . . .	—	—	—	3	1
Kavirondo, Ja-luo speech . . . . .	—	1	1	2	—
Lendu . . . . .	—	—	—	3	4
Acholi, Bari, Aluru . . . . .	—	1	2	3	—
Karamojo . . . . .	—	—	1	4	1
Sūk . . . . .	1	2	2	5	—
Masai . . . . .	1	3	2	1	—
Andorobo . . . . .	—	8	2	1	—
Kamásia . . . . .	—	2	2	1	—
Nandi . . . . .	—	1	2	4	—

By this means a group comprising the Sūk, Masai, Andorobo, and to a less degree the Nandi, is clearly separated off from the Bantu, Baganda, Basoga, Wanyamwezi, and

Kavirondo. It is interesting to contrast Count Schweinitz's observations with the above; he found the distribution in German territory to be—

TRIBE.	LEPTORHINE.	MESORHINE.	PLATYRHINE.	HYPERPLATYRHINE.	ULTRAPLATYRHINE.
Wagogo .	2	7	2	1	1
Wangoni .	1	1	5	6	3
Wanyema .	—	—	2	5	1
Wanyamwezi .	—	—	3	1	1
Watusi .	1	2	1	—	—
Wasukuma .	—	4	1	4	1
Wasinja .	—	4	3	4	—
Wasiba .	—	1	4	2	—

It is unfortunately impossible, from the measurements taken in Uganda, to accurately calculate the facial index, but it would appear that the face is longer in the peoples dwelling in the Nile district than in other parts of the Protectorate. The Andorobo also would seem to differ from their neighbours in this respect.

The transverse prominence of the face is a feature of great importance, but here again the ordinary method of estimating this feature is not available. However, by dividing the distance between the inner angles of the eyes taken by a tape passing over the nose by the distance between the same points taken in a straight line by callipers, some indication of the prominence of the bridge nasal organ is obtained. The results of these observations are recorded under the heading "Bioculo-nasal Index." The results are scarcely sufficiently concordant to allow of much stress to be laid on this index of character, but a few points seem to be emphasised by it. The index is high in the Bahima in accordance with the statement in the preliminary observations.

The Masai present a much lower figure than might have been expected from a study of their nasal index, which seems to indicate that, although their nose is long and thin relatively to surrounding peoples, it is not very prominent in profile. The Karamojo and Sūk, in some respects closely related in physical characters, are by this method sharply separated, the bridge of the nose standing out far more in the former. The Bambute and Banande exhibit, as would be expected, a low index corresponding with absence of bridge referred to in the general description.

The bigonial index, or relation between the maximum bizygomatic width of the face and the width at the angle of the jaws, divides the series into three groups, one with a very narrow chin comprising the Bambute, Banande, Baamba, and Lendu, in whom the index is under 70; the Sūk, Kamásia, and Bahima, with an index in the neighbourhood of 70; the remaining individuals having much broader chins. Numerically this index may seem of little importance, but the effect of the width of the lower jaw on the facial ovoid, as seen in full-face view, is extremely marked. In this feature the Dwarf peoples are further removed from the ape than their neighbours.

The aurial index, or relation between the length and breadth of the ear, leads to closely similar grouping, the Bambute, Banande, and Lendu being separated widely from the remainder, with the exception of the Bahima. It is interesting to note that in this feature also the occupants of the forest zone more closely resemble the European and recede further from the simian type than do the surrounding population. Topinard in his text-book points out that this index is lowest among the yellow races, intermediate in Europeans, and at a maximum in the negroes of Africa and Melanesia. In the apes it is still higher than in man.

The proportions of the body are no less interesting than those of the head. The average height varies from 1452 millimetres in the Bambute to 1847 millimetres in the Bahima, though the tallest individual actually measured (1887 mm.) belonged to the Logbwari tribe. The Masai and Nilotic negroes are decidedly taller than their neighbours, next in order being the Karamojo, the Andorobo, Nandi, and Bantu tribes, forming a group of moderate height intermediate between these and the Dwarf people.

The span in most cases is relatively greater than in Europeans, probably because of the proportionately greater length of the forearms in the negro races, the Sūk forming a notable exception, being somewhat narrow-chested. The umbilicus in nearly all cases is a little above the centre of the body; the Dwarf peoples, however, stand out prominently, for in them the mid point of the body is above, and not below, that

landmark. The head has rather smaller vertical relative dimensions than in the European, the Dwarfs and the Nilotic negroes approaching most nearly to our mean canon. The neck is relatively longer and the trunk shorter than in the white races, the latter feature reaching its acme among the Bahima and Masai. Both limbs are relatively increased, but whereas in the upper limb the excess is in the distal segment, in the lower it is in the proximal. The hands are smaller and the feet often relatively larger than those of Europeans; considerable racial variation, however, occurs. The Masai have hands and feet both absolutely and relatively large. The Dwarf peoples, Nilotic negroes, Ja-luo-speaking Kavirondo, Kamásia, Nandi, and Sūk have relatively smaller hands and feet than the average white, while the Bantu peoples in the series, the Lendu, Karamojo, and Andorobo, have smaller hands but larger feet.

Should more extended observations confirm the present series, the relative proportions of the limbs and of the hands and feet would afford valuable evidence towards a classification of the peoples of the Uganda Protectorate.

Applying the above-mentioned facts to purposes of classification as far as can be made out from the limited material at present at our disposal, a few groups can be distinguished.

The *Bambute*, *Baamba*, and *Banande* form a class to themselves, characterised by a brachycephalic skull, broad depressed nose with a high index, flattened face, narrow chin, small ears, short stature, slender limbs, and small hands and feet.

The *Masai*, who are tall, dolichocephalic, mesorhine, with a low bioculo-nasal index with relative great span, long lower limbs, feet and hands relatively greater than Europeans, though their feet are relatively smaller than those of the Bantu group.

The *Acholi* and *Bari*: tall, mesaticephalic, platyrhine, with a small bioculo-nasal index, relatively long lower limbs, legs, and forearms, but small feet and hands.

A group somewhat less well defined than the foregoing, comprising the *Baganda*, *Basoga*, *Wanyamwezi*, intermediate in most respects, yet with close mutual agreement, with relatively large feet and small hands.

A few other groups remain to be discussed. The *Kavirondo* fall into two series, those of Bantu speech and those of Ja-luo speech, the physical characters of the two approximating to the Basoga and Acholi groups respectively.

The *Lendu* in most features would seem to be intermediate between the Nilotic negro and the small races of the Congo Forest zone. In stature and in the proportions of the limbs they agree with the Acholi, in face and ears they more closely resemble the Bambute. In cephalic index and the relatively large size of the feet they agree with neither.

The *Karamojo* in their bodily proportions would appear to closely resemble, if they have not affinities with, the Bantu-speaking group. In their cranial and facial characters they seem to be intermediate between the Bantu and the Masai, though in the proportions of their limbs and the size of the hands they differ widely from the latter people.

The *Sūk* stand in a somewhat similar relationship to the Acholi.

The *Kamásia*, *Nandi*, and *Andorobo* are a somewhat aberrant group with intermediate characters best expressed in the tables. This is a very heterogeneous group, combining characteristics of other negro types. They are obviously a people of mixed origin.

The *Bahima* are distinguished from the other groups mainly by the prominence and length of the nose. In this feature they approach the European or Hamite. The lower part of the face is narrower than the average negro, the ears approach the European type, and the head is actually larger than in the average negro. In short, in many respects they are negroid rather than negro. In other measurements than those instanced they approximate pretty closely to the Bantu.

## AVERAGE INDICES CALCULATED FROM

TRIBE . . . . .	BAMBUTE. 6 ♂	BAMBUTE. 6 ♂	BAGANDA. 3 ♂ 5 ♀		BASOGA. 4 ♂	KAVIRONDO. BANTU-SPEAKING. 4 ♂ JA-LUO-SPEAKING. 4 ♂	
		BANANDE. 2 ♂ BAAMBA. 2 ♂					
Cephalic . . . . .	78.7	79.4	74.4	72.6	75.4	76.4	77.5
Length-height . . . . .	66.7	68.4	66.0	68.4	69.2	69.5	72.4
Nasal . . . . .	109.7	105.8	93.9	103.7	106.1	104.1	86.6
Bigonial . . . . .	65.2	67.7	75.3	73.7	80.5	80.3	79.3
Bioculo-nasal . . . . .	113.9	115.6	127.0	115.3	118.3	110.4	114.8
Aural . . . . .	56.9	57.0	69.6	64.4	62.6	59.0	62.3
Modulus . . . . .	152.7	154.1	158.3	150.1	156.7	157.8	161.2

## AVERAGE PROPORTIONS OF THE DIFFERENT SEGMENTS OF THE

TRIBE . . . . .	BAMBUTE. 6 ♂	BANANDE. 2 ♂	BAGANDA. 3 ♂ 5 ♀		BASOGA. 4 ♂	KAVIRONDO. BANTU SPEECH. 4 ♂ JA-LUO SPEECH. 4 ♂		WAN- YAM- WEZI. 6 ♂	LENDU. 2 ♂
		BAMBUTE. 6 ♂ BAAMBA. 2 ♂							
Actual standing height	1452	1497	1692	1560	1685	1722	1791	1732	1711
Head . . . . .	13.2	13.3	12.6	12.9	12.0	—	—	12.5	12.4
Neck . . . . .	6.2	5.7	5.4	5.1	5.5	—	—	4.7	5.1
Trunk . . . . .	31.0	32.0	32.4	32.9	32.4	—	—	31.8	30.8
Span . . . . .	103.5	104.2	107.2	104.1	106.5	—	—	103.0	106.1
Upper limb . . . . .	47.8	47.8	48.4	47.5	48.5	47.8	47.4	46.9	48.8
Arm . . . . .	19.6	19.2	19.3	19.2	19.4	—	—	18.4	18.7
Forearm . . . . .	17.1	17.6	17.9	17.6	18.3	—	—	17.9	19.0
Hand . . . . .	11.1	10.9	11.1	10.9	10.7	11.1	10.8	10.6	11.1
Lower limb . . . . .	49.6	49.3	49.7	49.1	50.1	50.5	53.0	50.9	51.6
Thigh . . . . .	24.0	23.9	24.1	23.9	24.1	—	—	24.8	26.0
Leg . . . . .	19.9	20.1	20.2	20.1	20.3	—	—	21.2	21.1
Foot . . . . .	14.5	14.6	15.4	14.9	15.1	15.3	14.6	15.6	15.4
Breadth of shoulders . . . . .	22.9	23.3	24.2	23.0	23.7	—	—	22.8	24.9
Breadth of hips . . . . .	16.9	17.2	17.7	19.1	17.0	—	—	17.4	17.3
Height of umbilicus . . . . .	58.4	58.8	62.7	59.9	60.3	—	—	60.3	61.0
Girdle index . . . . .	74.2	74.0	73.3	82.8	71.5	—	—	76.5	69.5
Antebrachial index . . . . .	87.2	91.7	92.7	91.7	94.3	—	—	97.3	101.6
Tibio femoral index . . . . .	82.9	84.1	83.8	84.1	84.2	—	—	85.5	81.2

MEASUREMENTS OF THE HEAD.

WAN- YAM- WEZI. 6 ♂	LENDU.		ACHOLI. 3 ♂ BARI. 1 ♂	KARA- MOJO. 4 ♂	SUK. 9 ♂	MASAL.		ANDOROBO.		KAM- ASIA. 5 ♂	NANDI. 5 ♂	BAHIMA. 3 ♂
	2 ♂	4 ♀				5 ♂	3 ♀	8 ♂	3 ♀			
75.7	73.6	74.1	78.1	73.3	76.3	73.3	75.9	76.0	76.2	78.0	72.8	73.1
65.3	60.3	65.9	71.8	62.5	68.1	66.5	67.6	70.0	73.2	67.3	68.8	65.3
98.8	112.7	105.6	86.7	89.7	84.3	82.6	76.9	83.6	77.6	81.0	88.5	92.0
73.5	67.4	70.3	74.7	75.4	70.8	74.3	80.8	76.5	79.3	69.4	74.2	70.0
120.4	121.4	110.9	121.0	126.0	118.1	116.4	117.3	123.6	121.7	128.8	130.7	140.5
63.3	54.8	58.7	65.6	63.6	66.9	—	—	—	—	—	—	58.4
156.3	150.5	153.4	158.1	157.0	157.3	159.9	153.5	156.2	146.9	155.8	155.9	159.4

BODY TO THE STANDING HEIGHT = 100.

LENDU. 4 ♀	ACHOLI. 2 ♂ BARI. 1 ♂	KARA- MOJO. 4 ♂	SUK. 9 ♂	MASAL.		ANDOROBO.		KAM- ASIA. 5 ♂	NANDI. 5 ♂	BAHIMA. 3 ♂	MEAN EUROPEAN CANON OF PROPORTION (TOPINARD.) ♂
				5 ♂	3 ♀	8 ♂	3 ♀				
1621	1763	1725	1716	1778	1642	1663	1530	1692	1680	1847	—
12.6	13.2	11.9	12.3	12.6	13.0	13.5	12.6	12.5	12.7	12.2	13.3
5.3	3.7	4.5	4.7	4.9	4.9	5.0	4.8	5.1	5.1	6.2	4.2
32.2	30.6	32.1	29.5	28.7	28.0	30.4	31.8	29.5	31.0	29.1	35.0
104.4	105.5	105.8	101.9	107.3	102.6	103.4	99.7	107.1	103.7	105.5	104.4
47.5	47.8	48.8	46.7	46.5	47.7	47.4	45.9	48.4	47.1	48.0	45.0
18.7	18.9	19.8	19.1	17.6	19.1	18.9	18.4	19.6	18.9	19.3	19.5
17.8	18.4	18.0	17.4	16.9	16.7	17.3	16.8	17.9	17.4	17.8	14.0
11.0	10.5	10.9	10.3	12.1	12.0	11.3	10.6	10.8	10.9	10.9	11.5
49.9	53.2	51.4	52.9	54.1	55.0	51.3	50.7	52.9	51.2	51.9	47.5
24.3	25.4	25.1	26.3	26.9	26.5	25.4	24.2	26.7	25.0	25.5	20.0
21.9	22.1	21.3	21.8	21.9	22.3	20.7	21.7	20.9	21.3	22.3	23.0
14.7	14.7	15.6	14.7	15.0	14.3	15.7	14.4	14.7	14.8	15.2	15.0
22.6	23.4	23.0	22.8	23.8	22.4	23.4	21.6	23.8	22.9	22.2	23.0
24.4	17.1	17.9	16.9	17.8	18.3	17.4	17.6	17.4	17.1	17.7	18.8
61.4	61.5	60.9	60.8	61.6	63.7	60.7	62.0	62.0	61.9	59.8	60.0
80.8	73.0	78.1	74.3	74.9	81.7	74.0	81.7	73.0	74.8	80.4	81.7
95.2	97.3	90.9	91.1	96.0	87.4	91.5	91.3	91.3	92.1	92.2	—
90.1	87.0	84.9	82.9	81.4	84.2	81.5	89.2	78.3	85.2	87.4	—



TRIBE	BANANDE.		BAMBUTE.					
	1	2	3	4	5	6	7	8
Number								
Age	40	45	30	34	35	20	22	20
Sex	♂	♂	♂	♂	♂	♂	♂	♂
Standing height	1575	1460	1418	1428	1472	1523	1438	1434
Height of head from vertex to chin	192	210	174	193	205	206	176	195
Length of neck in front	83	—	77	91	90	89	93	102
Length of trunk	534	507	453	470	482	449	450	397
Span of arms	1635	1541	1436	1532	1548	1559	1443	1501
Length of upper limb	738	688	686	707	702	737	659	675
Length of arm	284	245	273	296	286	308	281	265
Length of forearm	284	298	254	242	253	262	225	252
Length of hand	170	145	159	169	163	167	153	158
Length of lower limb	766	702	714	674	695	779	719	740
Length of thigh	377	334	344	320	328	385	350	369
Length of leg	306	(?)	288	282	285	308	287	288
Length of foot	234	204	194	(?)	219	220	201	220
Height from internal malleolus to ground	83	(?)	82	72	82	86	82	83
Maximum breadth of shoulders	360	359	302	333	360	369	313	318
Maximum breadth of hips	271	275	230	255	255	266	231	240
Height to umbilicus	931	881	826	826	850	905	835	849
Circumference of chest	780	800	700	730	745	760	702	678
Minimum supra-malleolar circumference of leg	193	175	170	170	162	193	160	160
Maximum supra-malleolar circumference of leg	323	285	245	260	280	290	241	230
<i>Proportions to height = 100.</i>								
Head	12.2	14.4	12.3	13.5	13.9	13.5	12.2	13.6
Neck	5.3	—	5.4	6.4	6.1	5.8	6.5	7.1
Trunk	33.9	34.7	31.9	32.9	32.7	29.5	31.3	27.7
Span	103.8	105.5	101.3	107.3	105.2	102.4	100.3	104.7
Upper limb	46.9	47.1	48.4	49.5	47.7	48.4	45.8	47.1
Arm	18.0	16.8	19.3	20.7	19.4	20.2	19.5	18.5
Forearm	18.0	20.4	17.9	16.9	17.2	17.2	15.6	17.6
Hand	10.8	9.9	11.2	11.8	11.1	11.0	10.6	11.0
Lower limb	48.6	48.1	50.4	47.2	47.2	51.1	50.0	51.6
Thigh	23.9	22.9	24.3	22.4	22.3	25.3	24.3	25.7
Leg	19.4	(?)	20.3	19.7	19.4	20.2	20.0	20.1
Foot	14.9	14.0	13.7	—	14.9	14.4	14.0	15.3
Breadth of shoulders	22.9	24.6	21.3	23.3	24.5	24.2	21.8	22.2
Breadth of hips	17.2	18.8	16.2	17.9	17.3	17.5	16.1	16.7
Height of umbilicus	59.1	60.3	58.3	57.8	57.7	59.4	58.1	59.2
Girdle index	75.3	76.6	76.2	76.6	70.8	72.1	73.8	75.5

BAMBUTE.		BAAMBA.		BAGANDA.								BASOGA.
9	10	11	12	13	14	15	16	17	18	19	20	21
20	30	45	40	25	40	50	24	28	30	30	35	48
♀	♀	♂	♂	♂	♂	♂	♀	♀	♀	♀	♀	♂
1292	1427	1660	1562	1613	1658	1804	1554	1578	1610	1498	1559	1688
192	204	224	218	207	210	221	206	206	209	195	190	221
59	60	58	84	88	90	94	80	83	83	77	72	80
412	471	545	506	554	516	572	507	533	540	476	514	589
1329	1491	1828	1587	1719	1772	1949	1627	1597	1617	1563	1726	1799
590	666	812	748	766	807	884	769	724	729	707	788	833
228	251	323	315	302	328	352	317	298	285	278	319	326
230	255	304	265	283	300	328	298	248	273	260	290	326
142	160	185	168	181	179	204	154	178	171	169	179	181
629	692	833	754	764	842	917	761	756	778	750	783	798
301	318	401	367	361	416	447	372	354	384	364	393	359
255	296	343	324	309	338	378	317	317	315	309	306	325
212	221	267	220	249	256	277	233	235	234	227	235	257
73	78	89	63	94	88	92	72	85	79	77	84	104
299	328	408	364	423	385	417	356	367	352	349	370	408
241	267	301	261	311	278	309	311	304	303	277	291	303
751	841	998	914	975	1015	1199	941	939	942	903	944	977
700	830	906	750	870	815	891	830	888	762	740	803	847
180	—	210	178	208	189	209	197	194	195	185	175	184
270	—	335	310	345	321	338	320	318	340	292	307	310
14'9	14'3	13'5	14'0	12'8	12'7	12'3	13'2	13'1	13'0	13'0	12'2	13'1
4'6	4'2	3'5	5'4	5'5	5'4	5'2	5'1	5'3	5'2	5'1	4'6	4'7
31'9	33'0	32'8	32'4	34'3	31'1	31'7	32'6	33'8	33'5	31'8	33'0	34'9
102'9	104'5	—	101'6	106'6	106'9	108'0	104'1	101'2	100'4	104'3	110'7	106'6
45'7	46'7	48'9	47'9	47'5	48'7	49'0	48'8	45'9	45'3	47'2	50'5	49'3
17'6	17'6	19'5	20'2	18'7	19'8	19'5	20'4	18'9	17'7	18'6	20'5	19'3
17'8	17'9	18'3	17'0	17'5	18'1	18'2	19'2	15'7	17'0	17'4	18'6	19'3
11'0	11'2	11'1	10'8	11'2	10'8	11'3	10'0	11'3	10'6	11'3	11'5	10'7
47'9	48'5	50'2	48'3	47'4	50'8	50'8	49'0	47'9	48'3	50'1	50'2	47'3
23'3	22'3	24'2	23'5	22'4	25'1	24'8	23'9	22'4	23'9	24'3	25'2	21'3
19'7	20'7	20'7	20'7	19'2	20'4	21'0	20'4	20'1	19'6	20'6	19'6	19'3
16'6	15'5	16'1	14'0	15'4	15'4	15'4	15'0	14'9	14'5	15'2	15'1	15'2
23'1	23'0	24'6	23'3	26'2	23'2	23'1	22'9	23'3	21'9	23'3	23'7	24'2
18'7	18'7	18'1	16'7	19'3	16'8	17'1	20'0	19'3	18'8	18'5	18'7	18'0
58'1	58'9	60'1	58'5	60'4	61'2	66'4	60'6	59'5	58'5	60'3	60'6	57'9
80'6	81'4	71'7	71'7	73'5	72'2	74'1	87'3	82'8	86'0	79'3	78'6	74'3



TRIBE	BASOGA.			KAVIRONDO.				
	22	23	24	25	26	27	28	29
Number	22	23	24	25	26	27	28	29
Age	20	50	29½	30	40	26	25	26
Sex	♂	♂	♂	♂	♂	♂	♂	♂
Standing height	1657	1679	1715	1714	1787	1687	1702	1839
Height of head from vertex to chin	201	179	210	229	228	221	215	221
Length of neck in front	75	118	99	56	97	70	76	69
Length of trunk	538	515	540	553	560	537	567	571
Span of arms	1773	1792	1815	1849	1825	1787	1706	1867
Length of upper limb	798	811	825	865	837	815	777	851
Length of arm	330	322	333	363	324	330	305	344
Length of forearm	293	309	309	305	313	295	293	319
Length of hand	175	180	183	197	200	190	179	188
Length of lower limb	843	867	866	876	902	859	844	978
Length of thigh	406	436	423	420	427	432	411	490
Length of leg	333	353	356	357	386	—	—	405
Length of foot	252	256	257	248	281	266	257	264
Height from internal malleolus to ground	94	78	87	99	89	—	—	83
Maximum breadth of shoulders	393	385	414	425	443	418	401	411
Maximum breadth of hips	274	286	281	296	324	282	284	286
Height to umbilicus	1035	1014	1038	1033	1063	994	1001	1130
Circumference of chest	835	864	907	948	982	883	944	891
Minimum supra-malleolar circumference of leg	165	175	194	205	222	—	—	220
Maximum supra-malleolar circumference of leg	277	280	316	342	378	345	340	338
<i>Proportions to height = 100.</i>								
Head	12.1	10.7	12.2	13.4	12.8	13.1	12.6	12.0
Neck	4.5	7.0	5.8	3.3	5.4	4.1	4.5	3.8
Trunk	32.5	30.7	31.5	32.3	31.3	31.8	33.3	31.0
Span	107.0	106.7	105.8	107.9	102.1	105.9	100.2	101.5
Upper limb	48.2	48.3	48.1	50.5	46.8	48.3	45.7	46.3
Arm	19.9	19.2	19.4	21.2	18.1	19.6	17.9	18.7
Forearm	17.7	18.4	18.0	17.9	17.5	17.5	17.2	17.3
Hand	10.6	10.7	10.7	11.5	11.2	11.3	10.5	10.2
Lower limb	50.9	51.6	50.5	51.1	50.5	50.9	49.6	53.2
Thigh	24.5	26.0	24.7	24.5	23.9	25.6	24.1	21.2
Leg	20.1	21.0	20.8	20.8	21.6	—	—	22.0
Foot	15.2	15.2	15.0	14.5	15.7	15.8	15.1	14.4
Breadth of shoulders	23.7	22.9	24.1	24.8	24.8	24.8	23.6	22.3
Breadth of hips	16.5	17.0	16.4	17.3	18.1	16.7	16.7	15.6
Height of umbilicus	62.5	60.4	60.5	60.3	59.5	58.9	58.8	61.4
Girdle index	69.7	74.3	67.8	69.6	73.1	67.5	70.8	69.6

KAVIRONDO.			WANYAMWEZI.						SWAHILI	LENDU.		
30	31	32	33	34	35	36	37	38	39	40	41	42
30	35	36	30	30	25	40	35	45	25	28	30	24
♂	♂	♂	♂	♂	♂	♂	♂	♂	♀	♀	♀	♀
1813	1726	1785	1724	1785	1637	1745	1745	1757	1548	1563	1683	1603
224	206	216	215	212	219	225	207	222	225	205	210	197
81	89	109	88	92	65	73	92	85	52	81	81	87
518	517	549	561	525	531	564	549	574	549	526	510	512
1859	1838	1815	1781	1891	1688	1750	1716	1880	1596	1665	1757	1646
847	852	839	809	859	760	809	792	847	724	743	808	754
346	371	342	313	338	293	311	328	333	298	288	329	298
290	297	304	318	323	291	318	281	329	253	279	311	273
211	184	193	178	198	176	180	183	185	173	176	168	183
990	914	911	860	956	822	883	897	876	722	751	882	807
485	464	433	414	462	407	430	440	425	341	355	437	398
417	351	382	359	416	337	359	376	362	298	315	362	336
275	249	259	268	278	255	282	262	272	244	225	236	247
88	99	96	87	78	78	94	81	89	83	81	83	73
417	431	422	406	396	377	395	369	434	394	371	368	369
309	292	295	312	311	264	319	301	309	334	301	301	291
1115	1065	1077	1010	1134	978	1040	1065	1048	913	961	1057	960
912	888	920	960	910	875	912	812	970	849	818	840	865
205	200	212	220	217	200	230	200	212	194	203	185	210
347	330	330	380	350	332	356	320	365	343	335	315	330
12'4	11'9	12'1	12'4	11'9	13'4	12'9	11'9	12'6	14'5	13'1	12'5	12'3
4'5	5'2	6'1	5'1	5'2	3'4	4'2	5'3	4'8	3'4	5'2	4'8	5'4
28'6	30'0	30'8	32'5	29'4	32'4	32'3	31'5	32'7	35'5	33'7	30'3	31'9
102'5	106'5	101'7	103'3	105'9	103'1	100'3	98'3	107'0	103'1	106'5	104'4	102'7
46'7	49'4	47'1	46'9	48'1	46'4	46'4	45'4	48'2	46'8	47'5	48'0	47'0
19'1	21'5	19'2	18'2	18'9	17'9	17'8	18'8	19'0	19'3	18'4	19'5	18'6
16'0	17'2	17'0	18'4	18'1	17'8	18'2	16'1	18'7	16'3	17'9	18'5	17'0
11'6	10'7	10'8	10'3	11'1	10'8	10'3	10'5	10'5	11'2	11'3	10'0	11'4
54'6	53'0	51'0	49'9	53'6	50'2	50'6	51'4	49'9	46'6	48'0	52'4	50'3
28'8	26'9	24'3	24'0	25'9	24'9	24'6	25'2	24'2	22'0	22'7	26'0	24'8
23'0	20'3	21'4	20'8	23'3	20'6	20'6	21'5	20'6	19'3	20'2	21'5	21'0
15'2	14'4	14'5	15'5	15'6	15'6	16'2	15'0	15'5	15'8	14'4	14'0	15'4
23'0	25'0	23'6	23'5	22'2	23'0	22'6	21'1	24'7	25'5	23'7	21'9	23'0
17'0	16'9	16'5	18'1	17'4	16'1	18'3	17'2	17'6	21'6	19'3	17'9	18'2
61'5	61'7	60'3	58'6	63'5	59'7	59'6	61'0	59'6	59'0	61'5	62'8	59'9
74'1	67'7	69'9	76'8	78'5	70'0	80'8	81'6	71'2	84'8	81'1	81'8	78'9

TRIBE . . . . .	LENDU.			LOG-BWARI.	ALURU.		ACHOLI.	
Number . . . . .	43	44	45	46	47	48	49	50
Age . . . . .	20	28	30	25	22	20	36	40
Sex . . . . .	♀	♂	♂	♂	♀	♀	♂	♂
Standing height . . . . .	1634	1757	1665	1887	1554	1588	1697	1802
Height of head from vertex to chin } . . . . .	208	209	216	225	192	206	225	250
Length of neck in front . . . . .	83	82	91	78	75	51	62	52
Length of trunk . . . . .	540	534	520	603	507	532	509	535
Span of arms . . . . .	1702	1843	1786	1960	1643	1676	1810	1913
Length of upper limb . . . . .	778	850	821	892	715	779	811	883
Length of arm . . . . .	300	326	314	367	267	318	317	361
Length of forearm . . . . .	293	337	314	326	289	286	314	333
Length of hand . . . . .	185	187	193	199	159	175	180	189
Length of lower limb . . . . .	803	932	838	981	780	799	901	965
Length of thigh . . . . .	390	469	423	482	389	376	443	461
Length of leg . . . . .	343	386	337	428	318	338	361	412
Length of foot . . . . .	248	270	257	273	235	230	254	262
Height from internal malleolus to ground } . . . . .	70	77	78	71	73	85	87	92
Maximum breadth of shoulders . . . . .	357	429	425	444	327	307	385	433
Maximum breadth of hips . . . . .	291	308	286	317	278	277	282	310
Height to umbilicus . . . . .	1003	1099	993	1174	964	1011	1020	1122
Circumference of chest . . . . .	775	902	962	922	770	760	810	923
Minimum supra-malleolar circumference of leg } . . . . .	193	205	215	205	178	178	190	210
Maximum supra-malleolar circumference of leg } . . . . .	302	345	380	330	290	283	340	325
<i>Proportions to height = 100.</i>								
Head . . . . .	12.7	11.9	13.0	11.9	12.4	13.0	13.3	13.9
Neck . . . . .	5.8	4.7	5.5	4.1	4.8	3.2	3.7	2.9
Trunk . . . . .	33.0	30.4	31.2	32.0	32.6	33.5	30.0	29.7
Span . . . . .	104.2	104.9	107.3	103.9	105.7	105.5	106.7	106.2
Upper limb . . . . .	47.6	48.4	49.3	47.3	45.4	49.1	47.8	49.0
Arm . . . . .	18.4	18.6	18.9	19.4	17.2	20.0	18.7	20.0
Forearm . . . . .	17.9	19.2	18.9	17.3	18.6	18.0	18.5	18.5
Hand . . . . .	11.3	10.6	11.6	10.5	10.2	11.0	10.6	10.4
Lower limb . . . . .	49.1	53.0	50.3	52.0	50.2	50.3	53.1	53.6
Thigh . . . . .	23.9	26.7	25.4	25.5	25.0	23.7	26.1	25.6
Leg . . . . .	21.0	22.0	20.2	22.7	20.5	21.3	21.3	22.9
Foot . . . . .	15.2	15.4	15.4	14.5	15.1	14.5	15.0	14.5
Breadth of shoulders . . . . .	21.8	24.4	25.5	23.5	21.0	19.3	22.7	24.0
Breadth of hips . . . . .	17.8	17.5	17.2	16.8	17.9	17.4	16.6	17.2
Height of umbilicus . . . . .	61.4	62.5	59.6	62.2	62.0	63.7	60.1	62.2
Girdle index . . . . .	81.5	71.8	67.3	71.4	85.0	90.2	73.2	71.6

ACHOLI.	BARI.	KARAMOJO.						SÜK.				
51	52	53	54	55	56	57	58	59	60	61	62	63
30	45	30	50	25	25	25	30	38	60	50	30	50
♂	♂	♀	♂	♂	♀	♂	♂	♂	♂	♂	♂	♂
1789	1784	1626	1783	1777	1571	1676	1666	1758	1658	1819	1622	1779
221	222	209	202	217	213	193	210	210	200	—	198	221
82	81	70	97	75	43	80	62	66	71	—	83	94
573	560	490	558	569	493	543	548	553	524	506	492	561
1855	1791	1750	1889	1852	1598	1780	1780	1771	1719	1806	1586	1775
832	830	783	886	864	738	825	796	826	774	837	726	840
320	334	326	364	358	303	333	317	339	315	357	293	359
324	317	279	330	316	272	303	296	312	296	293	265	296
188	179	178	192	190	163	189	183	175	163	187	168	185
913	921	857	926	916	822	860	846	929	863	1019	849	903
437	438	397	454	454	410	414	411	450	414	538	430	429
393	403	390	382	376	333	362	351	394	371	403	350	378
259	254	241	273	276	208	264	261	245	250	247	249	283
83	80	70	86	86	79	84	84	85	78	78	69	96
419	417	398	378	416	357	378	416	382	395	405	368	412
311	307	334	314	317	288	298	309	290	289	301	284	311
1107	1103	1009	1081	1074	958	1029	1028	1103	1013	1051	985	1086
873	870	883	831	899	839	817	922	870	840	800	823	915
201	217	179	208	212	182	220	198	200	190	200	179	218
358	340	326	333	335	307	357	350	320	325	298	303	355
12'4	12'4	12'9	11'3	12'2	13'6	11'5	12'6	11'9	12'1	—	12'2	12'4
4'6	4'5	4'3	5'4	4'2	2'7	4'8	3'7	3'8	4'3	—	5'1	5'3
32'0	31'4	30'1	31'3	32'0	31'4	32'4	32'9	30'9	31'7	22'3	30'3	31'5
103'7	100'4	107'6	105'9	104'2	101'7	106'2	106'8	100'7	103'7	99'3	97'8	99'8
46'5	46'5	48'2	49'7	48'6	47'0	49'2	47'8	46'4	46'6	46'0	44'8	47'2
17'9	18'7	20'0	20'4	20'1	19'3	19'9	19'0	19'3	19'0	19'6	18'1	20'2
18'1	17'8	17'2	18'5	17'8	17'3	18'1	17'8	17'7	17'9	16'1	16'3	16'6
10'5	10'0	10'9	10'8	10'7	10'4	11'3	11'0	10'0	9'8	10'3	10'4	10'4
51'0	51'6	52'7	51'9	51'5	52'3	51'3	50'8	52'8	52'1	56'0	52'3	50'8
24'4	24'6	24'4	25'5	25'5	26'1	24'7	24'7	25'6	25'0	29'6	26'5	24'1
22'0	22'6	24'0	21'4	21'2	21'2	21'6	21'1	22'4	22'4	22'2	21'6	21'2
14'5	14'2	14'8	15'3	15'5	13'2	15'8	15'7	13'9	15'1	13'6	15'4	15'9
23'4	23'4	24'5	21'2	23'4	22'7	22'6	25'0	21'7	23'8	22'3	22'7	23'2
17'4	17'2	20'5	17'6	17'8	18'3	17'8	18'5	16'5	17'4	16'5	17'5	17'5
61'9	61'8	62'1	60'6	60'4	61'0	60'8	61'7	62'7	61'1	57'8	60'7	61'0
74'2	73'6	81'0	83'1	76'2	80'7	78'8	74'3	75'9	73'2	74'3	77'2	75'5

TRIBE . . . . .	SUK.					MASAI.		
Number . . . . .	64	65	66	67	68	69	70	71
Age . . . . .	60	25	30	30	25	42	30	20
Sex . . . . .	♂	♂	♂	♂	♀	♂	♂	♂
Standing height . . . . .	1698	1646	1670	1792	1669	1858	1781	1654
Height of head from vertex to chin } . . . . .	196	196	231	227	227	218	231	203
Length of neck in front . . . . .	95	77	70	79	—	—	76	101
Length of trunk . . . . .	526	481	500	519	536	—	506	478
Span of arms . . . . .	1723	1803	1675	1865	1716	1973	1850	1700
Length of upper limb . . . . .	815	826	755	829	792	915	859	769
Length of arm . . . . .	338	335	296	322	329	374	348	297
Length of forearm . . . . .	306	314	287	321	296	309	304	267
Length of hand . . . . .	171	177	172	186	167	232	207	205
Length of lower limb . . . . .	881	892	869	967	878	1040	968	872
Length of thigh . . . . .	432	451	435	486	441	513	482	430
Length of leg . . . . .	368	364	352	389	367	—	406	357
Length of foot . . . . .	242	251	244	263	229	266	273	264
Height from internal malleolus to ground } . . . . .	81	77	82	92	70	—	80	85
Maximum breadth of shoulders . . . . .	362	384	392	422	375	430	451	390
Maximum breadth of hips . . . . .	280	297	267	295	316	314	320	300
Height to umbilicus . . . . .	1006	1038	982	1118	1045	—	1090	1027
Circumference of chest . . . . .	856	859	793	872	891	885	790	840
Minimum supra-malleolar circumference of leg } . . . . .	178	187	189	195	192	195	200	193
Maximum supra-malleolar circumference of leg } . . . . .	302	330	302	328	331	340	320	310
<i>Proportions to height = 100.</i>								
Head . . . . .	11.5	11.9	13.8	12.7	13.6	11.7	13.0	12.3
Neck . . . . .	5.6	4.7	4.2	4.4	—	—	4.3	6.1
Trunk . . . . .	31.0	29.2	29.9	29.0	32.1	—	28.4	28.9
Span . . . . .	101.5	109.5	100.3	104.1	102.8	106.2	103.9	102.8
Upper limb . . . . .	48.0	50.2	45.2	46.3	47.5	49.2	48.2	46.5
Arm . . . . .	19.9	20.4	17.7	18.0	19.7	20.1	19.5	18.0
Forearm . . . . .	18.0	19.1	17.2	17.9	17.7	16.6	17.1	16.1
Hand . . . . .	10.1	10.8	10.3	10.4	10.0	12.5	11.6	12.4
Lower limb . . . . .	51.9	54.2	52.0	53.8	52.6	56.0	54.4	52.7
Thigh . . . . .	25.4	27.4	26.0	27.2	26.4	27.6	27.1	26.0
Leg . . . . .	21.7	22.1	21.1	21.7	22.0	—	22.8	21.6
Foot . . . . .	14.3	15.2	14.6	14.7	13.7	14.3	15.3	16.0
Breadth of shoulders . . . . .	21.3	23.3	23.5	23.5	22.5	23.1	25.3	23.6
Breadth of hips . . . . .	16.5	18.0	16.0	16.5	18.9	16.9	18.0	18.1
Height of umbilicus . . . . .	59.2	63.1	58.8	62.4	62.6	—	61.2	62.1
Girdle index . . . . .	77.3	77.3	68.1	69.9	84.3	73.0	71.0	76.9

MASAI.					ANDOROBO.							
72	73	74	75	76	77	78	79	80	81	82	83	84
38	38	20	17	23?	21	22	26	24	35	30	25	40
♂	♂	♀	♀	♀	♂	♂	♂	♂	♀	♀	♂	♀
1710	1888	1741	1583	1603	1677	1652	1684	1665	1474	1576	1589	1540
228	238	218	223	201	227	228	212	227	192	184	218	200
85	80	90	73	—	95	74	95	70	66	91	83	65
511	521	453	429	495	489	533	536	511	465	497	474	501
1722	1907	1811	1603	—	1779	1773	1723	1705	1427	1600	1606	1554
721	880	831	730	791	785	805	801	791	667	719	742	719
239	308	337	287	316	—	332	318	311	261	280	283	304
273	352	290	251	279	—	270	302	292	252	267	275	251
209	220	204	192	196	200	203	181	188	154	172	184	164
886	1049	980	858	872	866	817	841	857	751	804	814	774
440	535	522	445	342	421	390	419	429	369	373	397	368
364	—	388	—	—	362	354	344	339	310	354	324	332
253	277	250	230	224	255	257	273	255	212	223	258	228
82	—	70	—	—	83	73	78	89	72	77	93	74
397	450	366	370	366	390	383	391	393	330	333	362	329
312	338	313	282	305	300	276	295	304	248	273	273	289
—	—	1109	—	—	1007	1007	1029	1007	901	988	952	957
—	870	860	810	800	822	860	860	855	690	770	812	755
220	—	—	—	230	190	200	204	198	180	192	185	182
330	—	—	—	—	340	300	333	340	285	285	320	290
13'3	12'6	12'5	14'1	12'5	13'5	13'8	12'6	13'6	13'0	11'7	13'7	13'0
5'0	4'2	5'2	4'6	—	5'7	4'5	5'6	4'2	4'5	5'8	5'2	4'2
29'9	27'6	26'0	27'1	30'9	29'2	32'3	31'8	30'7	31'5	31'5	29'8	32'5
100'7	101'0	104'0	101'3	—	106'1	107'3	102'3	102'4	96'8	101'5	101'1	100'9
42'2	46'6	47'7	46'1	49'3	46'8	48'7	47'6	47'5	45'3	45'6	46'7	46'7
14'0	16'3	19'4	18'1	19'7	—	20'1	18'9	18'7	17'7	17'8	17'8	19'7
16'0	18'6	16'7	15'9	17'4	—	16'3	17'9	17'5	17'1	16'9	17'3	16'3
12'2	11'7	11'7	12'1	12'2	11'9	12'3	10'7	11'3	10'4	10'9	11'6	10'6
51'8	55'6	56'3	54'2	54'4	51'6	49'5	49'9	51'5	50'9	51'0	51'2	50'3
25'7	28'3	30'0	28'1	21'3	25'1	23'6	24'9	25'8	25'0	23'7	25'0	23'9
21'3	—	22'3	—	—	21'6	21'4	20'5	20'4	21'0	22'5	20'4	21'6
14'8	14'7	14'4	14'5	14'0	15'2	15'6	16'2	15'3	14'4	14'1	16'2	14'8
23'2	23'8	21'0	23'4	22'8	23'3	23'2	23'2	23'6	22'4	21'1	22'8	21'4
18'2	17'9	18'0	17'8	19'0	17'9	16'7	17'5	18'3	16'8	17'3	17'2	18'8
—	—	63'7	—	—	60'0	61'0	61'1	60'5	61'1	62'7	59'9	62'1
78'6	75'1	85'5	76'2	83'3	76'9	72'1	75'4	77'4	75'2	82'0	75'4	87'8



TRIBE . . . . .	ANDOROBO.			KAMÁSIA (NANDI).			
	85	86	87	88	89	90	91
Number . . . . .	28	40	25	30	22	38	24
Age . . . . .	♂	♂	♂	♂	♂	♂	♂
Sex . . . . .	1667	1762	1607	1750	1615	1713	1676
Standing height . . . . .	215	260	217	215	213	206	206
Height of head from vertex to chin . . . . .	90	—	72	94	72	70	96
Length of neck in front . . . . .	516	483	498	499	485	524	517
Length of trunk . . . . .	1733	1852	1584	1869	1622	1833	1883
Span of arms . . . . .	800	864	725	842	741	821	847
Length of upper limb . . . . .	314	361	282	341	289	331	357
Length of arm . . . . .	293	316	270	314	269	298	318
Length of forearm . . . . .	193	187	173	187	183	192	172
Length of hand . . . . .	846	970	820	942	845	913	857
Length of lower limb . . . . .	416	486	419	467	437	475	417
Length of thigh . . . . .	341	392	306	373	321	352	355
Length of leg . . . . .	259	282	255	256	249	251	243
Length of foot . . . . .	89	92	95	102	87	86	85
Height from internal malleolus to ground . . . . .	393	410	393	412	405	382	401
Maximum breadth of shoulders . . . . .	289	305	272	306	294	296	291
Maximum breadth of hips . . . . .	1016	1105	954	1101	969	1070	1043
Height to umbilicus . . . . .	832	868	840	848	790	840	903
Circumference of chest . . . . .	189	193	193	195	190	192	193
Minimum supra-malleolar circumference of leg . . . . .	307	328	328	328	300	346	327
Maximum supra-malleolar circumference of leg . . . . .	<i>Proportions to height = 100.</i>						
Head . . . . .	12.9	14.8	13.5	12.3	13.2	12.0	12.3
Neck . . . . .	5.4	—	4.5	5.4	4.5	4.1	5.7
Trunk . . . . .	31.0	27.4	31.0	28.5	30.0	30.6	30.8
Span . . . . .	104.0	105.1	98.6	106.2	100.4	107.1	112.4
Upper limb . . . . .	48.0	49.0	45.1	48.1	45.9	47.9	50.5
Arm . . . . .	18.8	20.5	17.5	19.5	17.9	19.3	21.3
Forearm . . . . .	17.6	17.9	16.8	17.9	16.7	17.4	19.0
Hand . . . . .	11.6	10.6	10.8	10.7	11.3	11.2	10.3
Lower limb . . . . .	50.7	55.1	51.0	53.8	52.3	53.3	51.1
Thigh . . . . .	25.0	27.6	26.1	26.7	27.1	27.7	24.9
Leg . . . . .	20.5	22.2	19.0	21.3	19.9	20.5	21.2
Foot . . . . .	15.5	16.0	15.9	14.6	15.4	14.7	14.5
Breadth of shoulders . . . . .	23.6	23.3	24.5	23.5	25.1	22.3	23.9
Breadth of hips . . . . .	17.3	17.3	16.9	17.5	18.2	17.3	17.4
Height of umbilicus . . . . .	60.9	62.7	59.4	62.9	60.0	62.5	62.2
Girdle index . . . . .	73.6	74.4	66.7	74.3	72.6	77.5	72.6

KAMASIA (NANDI).	NANDI.						LUMBWA (NANDI).	BAHIMA.				
92	93	94	95	96	97	98	99	100	101	102	103	104
28	30	24	26	35	50	18	30	30-35	30?	25	40	—
♂	♂	—	♀	♂	♂	♂	♂	♂	♂	♀	♀	♂
1705	1720	1607	1657	1808	1712	1551	1754	1798	1919	1553	1591	1823
219	210	211	216	223	229	195	228	225	—	207	216	233
96	99	70	69	97	78	79	72	111	—	79	89	—
470	523	510	532	571	524	476	576	502	648	542	498	465
1867	1799	1700	1733	1860	1794	1558	1772	1933	1973	1647	1581	1937
842	824	762	778	848	791	731	816	871	895	751	748	892
342	327	312	330	335	310	301	332	342	358	295	299	366
318	310	278	280	318	293	260	295	326	332	265	274	330
182	187	172	168	195	188	170	189	203	205	191	175	196
920	888	816	840	917	881	801	878	960	916	725	788	994
463	427	388	414	445	424	412	408	488	433	350	359	480
372	373	355	352	380	365	313	385	384	412	314	373	430
247	258	233	233	274	249	227	256	293	275	241	223	273
85	88	73	74	92	92	76	85	88	71	61	56	84
410	390	375	386	367	415	375	408	401	416	346	330	399
279	278	290	311	302	288	277	308	321	304	288	292	352
1062	1079	1005	1004	1130	1052	940	1057	1101	1074	244	912	1136
833	810	899	915	880	890	830	894	880	840	789	790	920
180	190	155	177	183	191	200	198	221	200	—	—	200
308	315	367	302	325	322	320	362	350	295	295	290	335
12'8	12'2	13'1	13'6	12'3	13'4	12'6	13'0	12'5	11'4	13'3	13'6	12'8
5'6	5'8	4'4	4'2	5'4	4'6	5'1	4'1	6'2	—	5'1	5'6	—
27'6	30'4	31'7	32'1	31'6	30'6	30'7	32'8	27'9	33'8	34'9	31'3	25'5
109'5	104'6	105'8	104'6	102'9	104'8	100'5	101'0	107'5	102'8	106'1	99'4	106'3
49'4	47'9	47'4	47'0	46'9	46'2	47'1	46'5	48'4	46'6	48'4	47'0	48'9
20'1	19'0	19'4	19'9	18'5	18'1	19'4	18'9	19'0	18'7	19'0	18'8	20'1
18'7	18'0	17'3	16'9	17'6	17'1	16'8	16'8	18'1	17'3	17'1	17'2	18'1
10'7	10'9	10'7	10'1	10'8	11'0	11'0	10'8	11'3	10'7	12'3	11'0	10'8
54'0	51'6	50'8	50'7	50'7	51'5	51'6	50'1	53'4	47'7	46'7	49'5	54'5
27'2	24'8	24'1	25'0	24'6	24'8	26'6	23'3	27'7	22'6	22'5	22'6	26'3
21'8	21'7	22'1	21'2	21'0	21'3	20'2	21'9	21'9	21'5	20'2	23'4	23'6
14'5	15'0	14'5	14'1	15'2	14'5	14'6	14'6	16'3	14'3	15'5	14'0	15'0
24'0	22'7	23'3	23'3	20'3	24'2	24'2	23'3	22'9	21'7	22'3	20'7	21'9
16'4	16'2	18'0	18'8	16'7	16'8	17'9	17'6	17'9	15'8	18'5	18'4	19'3
62'3	62'7	62'5	60'6	62'5	61'4	60'6	60'3	61'2	56'0	—	57'3	62'3
68'0	71'3	77'3	80'6	82'3	69'4	73'8	75'5	80'0	73'1	83'2	88'5	88'2

TRIBE . . . . .		BANANDE.		BAMBUTE.					
Number . . . . .		1	2	3	4	5	6	7	8
Age . . . . .		40	45	30	34	35	20	22	20
Sex . . . . .		♂	♂	♂	♂	♂	♂	♂	♂
Head	Maximum length . . . . .	179	177	184	192	182	186	185	191
	Maximum breadth . . . . .	148	143	149	151	141	153	145	142
Bizygomatic breadth . . . . .		140	136	130	139	133	143	130	132
Bigonial breadth . . . . .		105	95	85	91	89	91	82	88
External biorbital breadth . . . . .		145	142	150	156	152	160	152	155
Internal biocular breadth . . . . .		30	34	31	36	35	35	34	33
Length of ear . . . . .		61	62	58	54	58	59	55	57
Breadth of ear . . . . .		33	32	31	32	31	34	34	32
Length from nasal spine to root . . . . .		37	45	48	41	40	43	35	41
Breadth " " " " . . . . .		45	44	41	44	50	46	45	43
<i>Indices.</i>									
Cephalic . . . . .		82.7	80.8	81.0	78.6	77.5	82.3	78.4	74.3
Nasal . . . . .		121.6	97.8	85.4	107.3	125.0	106.9	128.6	104.9
Bigonial . . . . .		75.0	69.9	65.4	65.5	66.9	63.6	63.1	66.7
Aural . . . . .		54.1	51.6	53.4	59.3	53.4	57.6	61.8	56.1

TRIBE . . . . .		BASOGA.			KAVIRONDO.				
Number . . . . .		22	23	24	25	26	27	28	29
Age . . . . .		20	50	29½	30	40	26	25	26
Sex . . . . .		♂	♂	♂	♂	♂	♂	♂	♂
Head	Maximum length . . . . .	183	195	193	182	193	197	198	194
	Maximum breadth . . . . .	146	139	152	146	149	148	145	146
Bizygomatic breadth . . . . .		129	132	135	140	147	136	139	136
Bigonial breadth . . . . .		98	111	108	105	117	116	113	104
External biorbital breadth . . . . .		142	138	147	145	172	165	163	142
Internal biocular breadth . . . . .		32	35	34	33	46	40	35	38
Length of ear . . . . .		52	51	54	67	57	53	60	59
Breadth of ear . . . . .		32	32	34	39	34	32	34	37
Length from nasal spine to root . . . . .		37	41	42	45	40	41	45	42
Breadth " " " " . . . . .		40	41	48	43	50	43	41	40
<i>Indices.</i>									
Cephalic . . . . .		79.8	71.3	78.8	80.2	77.2	75.1	73.2	75.3
Nasal . . . . .		108.1	100.0	114.3	95.5	125.0	104.9	91.1	95.2
Bigonial . . . . .		76.0	84.1	80.0	75.0	79.6	85.3	81.3	76.5
Aural . . . . .		61.5	62.7	63.0	58.2	59.6	60.4	56.7	62.7

BAMBUTE.		BAAMBA.		BAGANDA.								BASOGA.
9	10	11	12	13	14	15	16	17	18	19	20	21
20	30	45	40	25	40	50	24	28	30	30	35	48
♀	♀	♂	♂	♂	♂	♂	♀	♀	♀	♀	♀	♂
164	174	193	189	198	189	206	185	189	194	179	187	198
133	139	158	144	146	143	152	135	136	141	131	135	142
127	133	151	139	137	134	146	126	132	129	126	136	133
—	82	110	95	103	100	117	94	97	96	95	96	109
137	145	135	151	160	140	170	132	135	130	121	143	145
37	—	34	34	36	31	38	34	32	34	31	32	35
59	57	59	55	53	46	58	49	56	53	50	47	57
32	34	35	35	38	33	38	34	31	31	32	35	36
39	36	50	43	43	42	46	35	38	41	35	40	46
37	40	44	40	38	41	44	39	36	45	35	41	47
81.1	79.9	81.9	76.2	73.7	75.7	73.8	73.0	72.0	72.7	73.2	72.2	71.7
105.4	111.1	88.0	93.0	88.4	97.6	95.6	111.4	94.7	109.7	100.0	102.5	102.2
—	61.7	72.8	68.3	75.2	74.6	80.1	74.6	73.5	74.4	75.4	70.6	82.0
54.2	59.6	59.3	63.6	71.7	71.7	65.5	69.4	55.4	58.5	64.0	74.5	63.2

KAVIRONDO.			WANYAMWEZI.						SWAHILI	LENDU.		
30	31	32	33	34	35	36	37	38	39	40	41	42
30	35	36	30	30	25	40	35	45	25	28	30	24
♂	♂	♂	♂	♂	♂	♂	♂	♂	♀	♀	♀	♀
190	194	198	201	195	195	193	189	194	190	205	189	187
147	150	154	154	153	147	151	136	143	142	141	141	144
133	139	138	138	139	137	144	137	136	131	135	135	136
107	111	111	96	102	106	106	96	105	96	89	98	99
145	147	155	143	146	142	137	142	142	137	142	150	148
36	37	33	37	37	36	38	31	38	33	38	35	40
57	63	60	58	56	59	62	62	69	62	53	58	56
32	38	41	39	37	35	42	39	39	41	30	34	33
51	46	49	47	45	44	45	42	50	36	35	45	40
42	42	38	44	43	41	48	47	46	44	38	42	40
77.4	77.3	77.8	76.6	78.5	75.4	78.2	72.0	73.7	74.7	68.8	74.6	77.0
82.4	91.3	77.6	93.6	95.5	93.2	106.6	111.9	92.0	122.2	108.6	93.3	100.0
80.5	79.9	80.4	69.6	73.4	77.4	73.6	70.1	77.2	73.3	65.9	72.6	72.8
57.9	60.3	68.4	67.2	66.1	59.3	67.7	62.9	56.5	66.1	56.6	58.6	58.9

TRIBE . . . . .		LENDU.			LOG-BWARI.	ALURU.		ACHOLI.	
Number . . . . .		43	44	45	46	47	48	49	50
Age. . . . .		20	28	30	25	22	20	36	40
Sex . . . . .		♀	♂	♂	♂	♀	♀	♂	♂
Head	Maximum length . . . . .	187	194	192	196	189	191	184	189
	Maximum breadth . . . . .	142	134	150	148	135	134	141	153
Bizygomatic breadth . . . . .		133	138	138	138	124	130	135	136
Bigonial breadth . . . . .		93	92	94	102	90	92	98	100
External biorbital breadth . . . . .		145	150	152	165	135	141	135	150
Internal biocular breadth . . . . .		37	35	35	37	34	35	34	31
Length of ear . . . . .		51	57	56	60	54	56	57	54
Breadth of ear . . . . .		31	32	30	35	27	32	44	33
Length from nasal spine to root . . . . .		34	41	38	44	35	35	47	47
Breadth " " " . . . . .		41	45	44	48	35	37	38	40
<i>Indices.</i>									
Cephalic . . . . .		75.9	69.1	78.1	75.5	71.4	70.2	76.6	81.0
Nasal . . . . .		120.6	109.7	115.8	109.1	100.0	105.7	80.9	85.1
Bigonial . . . . .		69.9	66.7	68.1	73.9	72.6	70.8	72.6	73.5
Aural . . . . .		60.8	56.1	53.6	58.3	50.0	57.1	77.2	61.1

TRIBE . . . . .		SŪK.					MASAL.		
Number . . . . .		64	65	66	67	68	69	70	71
Age . . . . .		60	25	30	30	25	42	30	20
Sex . . . . .		♂	♂	♂	♂	♀	♂	♂	♂
Head {	Maximum length . . . . .	190	189	190	194	187	196	203	195
	Maximum breadth . . . . .	146	148	139	139	139	147	149	143
Bizygomatic breadth . . . . .		131	136	131	139	132	140	143	139
Bigonial breadth . . . . .		98	104	99	108	99	—	100	93
External biorbital breadth . . . . .		155	162	160	150	153	160	175	150
Internal biocular breadth . . . . .		35	35	31	34	37	35	42	34
Length of ear . . . . .		54	51	58	57	49	—	—	—
Breadth of ear . . . . .		44	35	36	39	34	—	—	—
Length from nasal spine to root . . . . .		51	43	43	46	39	49	55	50
Breadth " " " . . . . .		40	38	39	39	40	40	44	43
<i>Indices.</i>									
Cephalic . . . . .		76.8	78.3	73.2	71.6	74.3	75.0	73.4	73.3
Nasal . . . . .		78.4	88.4	90.7	84.8	102.6	81.6	80.0	86.0
Bigonial . . . . .		74.8	76.5	75.6	77.7	75.0	—	69.9	66.9
Aural . . . . .		81.5	68.6	62.1	68.4	69.4	—	—	—







TRIBE . . . . .		ANDOROBO.			KAMÁSIA (NANDI).			
Number . . . . .		85	86	87	88	89	90	91
Age . . . . .		28	40	25	30	22	38	24
Sex . . . . .		♂	♂	♂	♂	♂	♂	♂
Head	Maximum length . . . . .	189	186	185	183	202	188	191
	Maximum breadth . . . . .	141	143	143	144	149	149	157
Bizygomatic breadth . . . . .		132	144	146	140	140	144	151
Bigonial breadth . . . . .		106	113	112	105	93	95	102
External biorbital breadth . . . . .		155	162	152	148	165	170	170
Internal biocular breadth . . . . .		30	35	38	34	35	30	40
Length of ear . . . . .		—	—	—	—	—	—	—
Breadth of ear . . . . .		—	—	—	38	—	—	36
Length from nasal spine to root . . . . .		47	48	47	46	50	51	44
Breadth " " " . . . . .		41	38	39	41	38	37	36
<i>Indices.</i>								
Cephalic . . . . .		74·6	76·9	77·3	78·7	73·8	79·3	82·2
Nasal . . . . .		87·2	79·2	83·0	89·1	76·0	72·5	81·8
Bigonial . . . . .		80·3	78·5	76·7	75·0	66·4	66·0	67·5
Aural . . . . .		—	—	—	—	—	—	—

KAMASIA (NANDI).	NANDI.						LUMBWA (NANDI).	BAHIMA.				
92	93	94	95	96	97	98	99	100	101	102	103	104
28	30	24	26	35	50	18	30	30-35	30?	25	40	—
♂	♂	♂	♀	♂	♂	♂	♂	♂	♂	♀	♀	♂
189	193	182	183	199	199	199	190	204	201	188	193	197
144	141	130	133	151	144	142	148	149	144	143	139	147
143	134	123	128	143	143	130	136	135	135	131	125	135
103	97	100	98	102	103	—	110	92	65	145	140	97
160	152	135	145	164	163	165	150	153	155	92	90	152
35	33	29	32	34	31	34	32	34	32	33	34	36
—	—	—	—	—	—	51	—	68	61	57	48	61
41	—	—	—	—	—	31	—	41	38	32	33	32
48	43	38	35	47	48	44	44	33	52	47	46	41
41	41	36	35	37	43	37	36	37	37	35	33	38
76.2	73.1	71.4	72.7	75.9	72.4	71.4	77.9	73.0	71.6	76.1	72.0	74.6
85.4	95.3	94.7	100.0	78.7	89.6	84.1	81.8	112.1	71.2	74.5	71.7	92.7
72.0	72.4	81.3	76.6	71.3	72.0	—	80.9	68.1	—	—	—	71.9
—	—	—	—	—	—	60.8	—	60.3	62.3	56.1	68.7	52.5

## CHAPTER XIV

### *PYGMIES AND FOREST NEGROES*

SUMMING up the experiences of many African travellers, together with my own observations, I should venture to say that there is a prognathous beetling-browed, short-legged, long-armed—"ape-like"—type of Negro dwelling in pariah tribes or cropping up as reversionary individuals in a better-looking people, to be met with all down Central Africa, from the Bahr-al-Ghazal to the upper waters of the Zambezi, and westwards from the Bahr-al-Ghazal to Portuguese Guinea. I have seen during my experience in British Central Africa very prognathous, ape-like Negroes coming from the regions round about the Congo-Zambezi watershed. They were slaves in Arab caravans. Messrs. Grogan and Sharp noticed this strange simian type between Lake Kivu and Lake Albert Edward, on the eastern edge of the Congo Forest.\* Knowing nothing at the time of their observations in this respect, I was much struck on entering the countries west of Ruwenzori at the ape-like appearance of some of the Negroes whom I encountered. These were either ostensibly members of the Bakonjo or Baamba tribes on the western flanks of that snowy range, or they were pariahs dwelling by themselves on the fringe of the great Congo Forest, west of the Semliki River. This ape-like type was generally known to the surrounding negroes as "Banande."† Whenever I

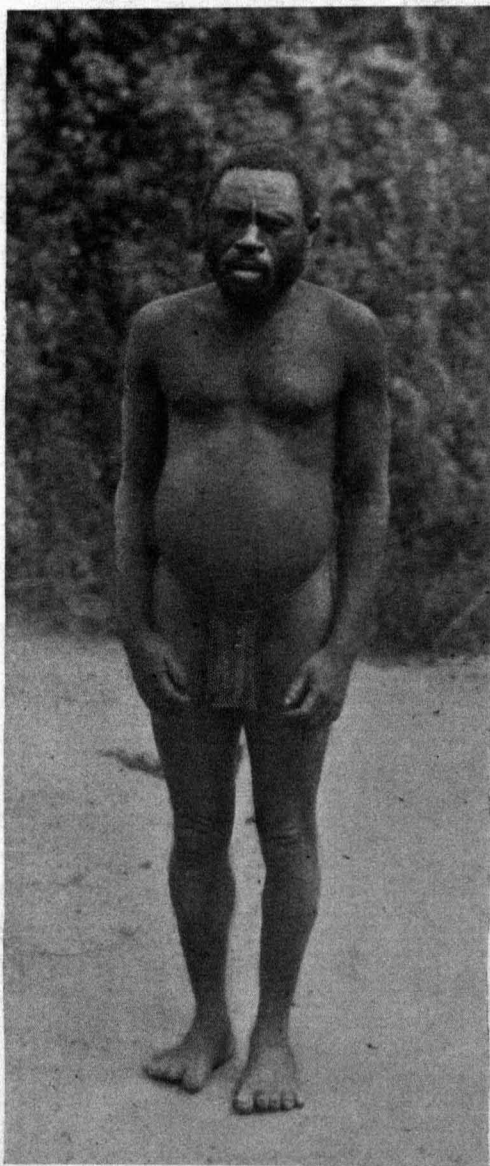
\* Dr. Stuhlmann met with it amongst the Basongora in the Congo watershed west of Lake Albert.

† This being a designation in the Bantu language would in the singular be "Munande." The root would be "-nande," a word offering a strange similarity to "Nandi," which is the name given to a particular tribe on the forested plateaux to the north-east of the Victoria Nyanza. The Nandi, however, of this part of the Protectorate are anything but ape-like in appearance, and are of a Negro or Masai stock which has received a strong intermixture in times past with the Hamite, the result being in some instances handsome and almost European features.

NOTE.—For convenience of reference, in the following six chapters dealing with anthropology I shall print in italics an occasional word or phrase giving the subject of the paragraph. Thus a reference to "marriage customs" will be facilitated if "marriage" (when specially dealt with) appears in italics. The same will occur with "industries," "physical characteristics," etc.

encountered a rather brutish individual in this part of the country, he always turned out to be a Munande, but I am not able to say that there was any definite ape-like tribe known as "Banande"; on the contrary, whilst here and there prognathous, short-legged individuals existed in separate communities in a pariah-like condition, very often they might be the offspring of Bakonjo, Babira, Baamba, or Bambuba peoples, who in their ordinary type were decidedly not simian, but who may have mingled in times past with the lowest stratum of the aboriginal population, with the result that the ape-like type still cropped up by occasional reversion. I should also observe that similar prognathous, long-upper-lipped, short-legged Negroes reappear, though in a less marked form, among the Bantu people on the western slopes of Mount Elgon, in the dense forests clothing the flanks of that huge extinct volcano.

The illustration on p. 513 was drawn from an individual whom I found lurking in the forest near the Belgian station of Fort Mbeni, to the west of the Semliki River. His skin was a dirty yellowish brown. He was accompanied by a wife or woman companion, differing



267. A MUNANDE

little in appearance from the ordinary negroes of the forest. I was told that individuals like himself were not at all uncommon in that district, though they were pariahs dwelling on the outskirts of native villages,

almost destitute of any arts or human accomplishments, living to a great extent on the raw flesh of such creatures as they shot with arrows and trapped in the forest, and also subsisting partially on wild honey and



268. A MUNANDE (SAME INDIVIDUAL AS NO. 257)

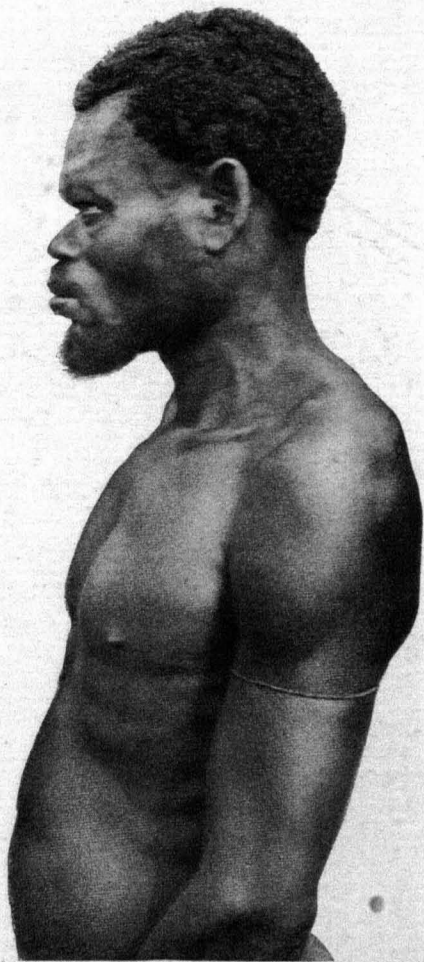
bee-grubs. The man was timid and it was very difficult to elicit any particulars from him. He appeared to speak imperfectly the language of the Babira (forest people (a degraded Bantu dialect)).

So far I have given the result of a general impression on the eye of various travellers who I have spoken of these negroes in the forested regions and border-lands of the Uganda Protectorate being "ape-like." But I should state that the skulls examined, the photographs and the physical appearance studied, the measurements of head and body analysed, do not enable scientific anthropologists to endorse the term "ape-like" which has been used by myself and others to describe these negroes of degraded aspect. Dr. Shrubsole, for instance, though admitting the low standing of these examples in the scale of negro development, does not hold that they are appreciably nearer the fundamental simian stock than the average Negro. He considers, however, that they offer sufficient general resemblance to the forest Pygmy type to be classed with them, perhaps in a group which I have styled (for want of a better name) the "Pygmy-Prognathous." The resemblance between the Pygmies and these Banans



would appear to be osteological. Outwardly there is no special likeness between the two groups. Further evidence may show that the ape-like type may crop up in any Negro race, whereas there can be no doubt that the forest Pygmies are a well-marked and distinct type of Negro.

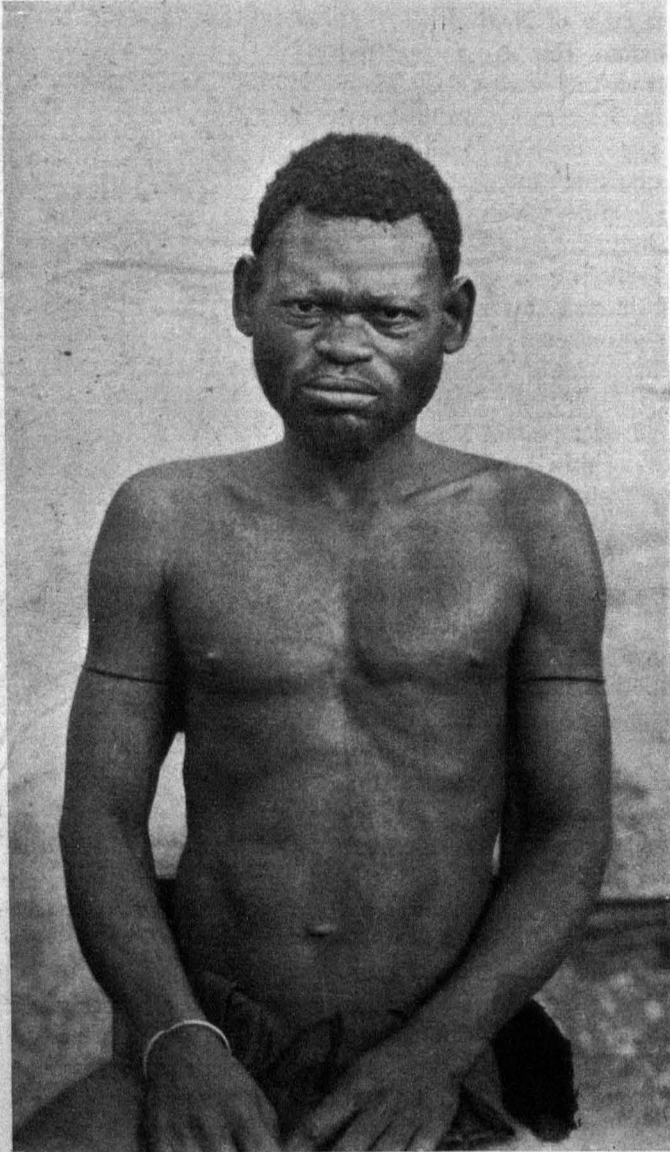
Even before the Negro quitted Arabia to invade and occupy the greater part of Africa he may have developed a Pygmy type, or have had a tendency to generate races of stunted stature. Remains which have been found in Sicily, in Sardinia, and the Pyrenees, including a curious little statuette fashioned by men of the Stone Age discovered in the last-named locality, hint at the possibility of men of this Pygmy Negro type having spread over part of Europe: it has been even hinted by more than one anthropologist of authority that a Dwarf negroid race may have, at one time, existed in Northern Europe, and by an exaggeration in legend and story of their peculiar habits—habits strangely recalling the characteristics of the little Dwarf people of the Congo of the present day—have given rise to the stories of kobolds, elves, sprites, gnomes, and fairies. Like some of the Bushmen (who are, however, an independent development or an arrested type of Negro) who inhabited South Africa when it was first discovered by Europeans, and who still exist in the south-western part of that continent, like the European and Asiatic races of the early Stone Age, these Negro Dwarfs in bleak or poorly forested regions no doubt lived in caves and holes, and the rapid manner in which they disappeared into these holes, together with their baboon-like adroitness in making themselves invisible in squatting immobility—a faculty remarkably present in the existing Dwarfs of the Congo Forest—they gave rise to the belief in the



269. AN "APE-LIKE" NEGRO FROM THE VERGE OF THE CONGO FOREST: MUBIRA OR MUNANDE



existence of creatures allied to man who could assume at will invisibility. Traits in the character of the Congo Dwarfs of the present day recall irresistibly the tricks of Puck, of Robin Goodfellow, of the gnomes and fairies of German and Celtic tradition.



270. AN "APE-LIKE" NEGRO (SAME AS NO. 269)



271. BAMBUTE PYGMIES FROM THE CONGO FOREST (WEST OF THE SEMLIKI RIVER)

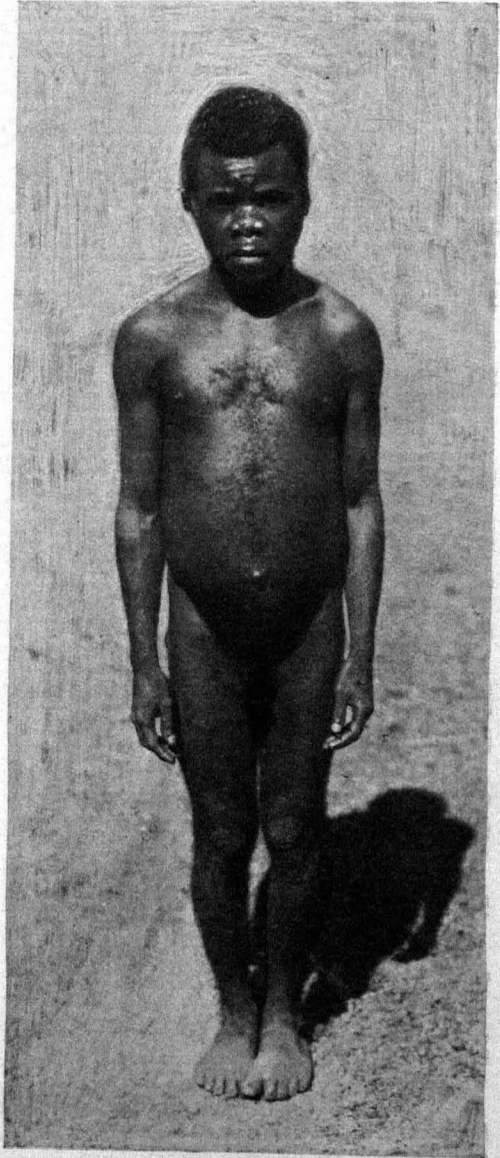
The little Pygmies of the Congo Forest do not themselves cultivate or till the soil, but live mainly on the flesh of beasts, birds, and reptiles, on white ants, bee-grubs, and larvæ of certain burrowing beetles. Nevertheless, they are fond of bananas, and to satisfy their hankering for this sweet fruit they will come at night and rob the plantations of their big black agricultural neighbours. If the robbery is taken in good part, or if gifts in the shape of ripe bananas are laid out in a likely spot for the Pygmy visitor who comes silently in the darkness or dawn, the little man will show himself grateful,



272. THREE BAMBUTE PYGMIES

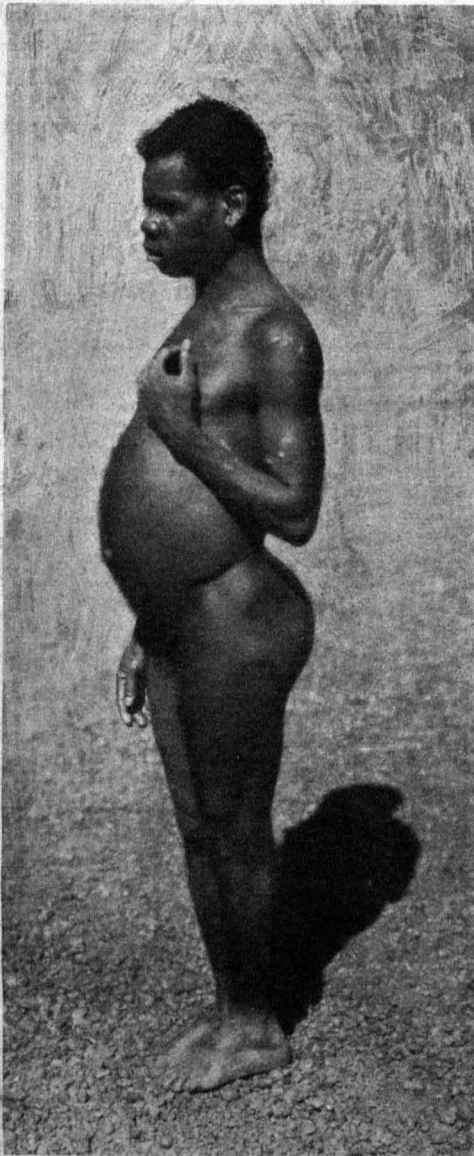
and will leave behind him some night a return present of meat, or he will be found to have cleared the plantation of weeds, to have set traps, to have driven off apes, baboons, or elephants whilst his friends and hosts were sleeping. Children, however, might be lured away from time to time to follow the Dwarfs, and even mingle with their tribe, like the children or men and women carried off by the fairies. On the other hand, it is sometimes related that when the Negro mother awoke in the morning her bonny, big, black child had disappeared, and its place had been taken by a frail, yellow, wrinkled Pygmy infant, the changeling of our stories. Any one who has seen as much of the Central African Pygmies as I have, and has noted their merry, impish ways; their little songs; their little dances; their mischievous pranks; unseen, spiteful vengeance; quick gratitude; and prompt return for kindness, cannot but be struck by their singular

resemblance in character to the elves and gnomes and sprites of our nursery stories. At the same time, we must be on our guard against reckless theorising, and it may be too much to assume that the Negro species ever inhabited Europe, in spite of the resemblance between the stone implements of palæolithic European man and those of the modern Tasmanians—and the Tasmanians were negroid if not negro. Palæolithic man in Europe may have been more like the Veddah, the Australian, the Dravidian, the Ainu, than the Bushman or Congo Pygmy. Undoubtedly (to my thinking) most “fairy” myths arose from the contemplation of the mysterious habits of dwarf troglodyte races lingering on still in the crannies, caverns, forests, and mountains of Europe after the invasion of neolithic man. But we must not too widely assume that these extinct Pygmy races were Negroes. They might well have been the dwarfed descendants of earlier and less definite human species; they may have been primitive Mongols like the Esquimaux. All the three species, or subspecies, of *Homo* have developed separately, repeatedly, and concurrently, dwarf and giant races. Tall peoples have arisen independently one after the other in Patagonia, in Equatorial Africa, in North Africa, Syria, Northern Europe, and Polynesia. Stunted races have been evolved in several parts of Africa, in Scandinavia, Japan, the An-



273. AN MBUTE PYGMY FROM BEYOND LUPÁNZULA'S  
(UPPER ITURI DISTRICT)





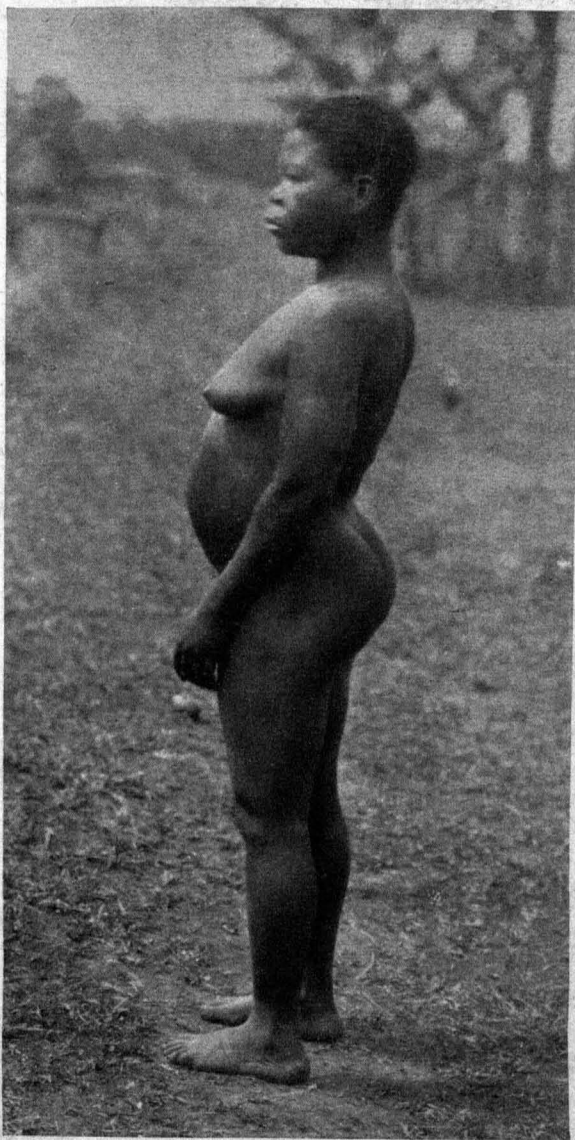
274. AN MBUTE PYGMY (SAME AS NO. 273)

daman and Philippine Archipelagoes, or amongst the Esquimaux.

I am not even inclined, now, to advocate the theory that the Congo Pygmies of Equatorial Africa are necessarily connected in origin with the South African Bushman. Some Bushmen tribes in South-West Africa, where better food conditions prevail, are scarcely Dwarfs. The Bushmen and Hottentots are obviously closely inter-related in physical structure; but I can see no physical features (other than dwarfishness) which are obviously peculiar to both Bushmen and Congo Pygmies. On the contrary, in the large and often protuberant eyes, the broad flat nose with its exaggerated *alæ*, the long upper lip and but slight degree of eversion of the inner mucous surface of the lips, the abundant hair on head and body, relative absence of wrinkles, of steatopygy, and of high, protruding cheek-bones, the Congo Dwarf differs markedly from the Hottentot-Bushman type. It is true that some of the Congo Pygmies intercalate their speech with faucal gasps in place of guttural consonants, but this defect in pronunciation need not necessarily contain any reminiscence of the Bushman click. There is one language

spoken in Eastern Equatorial Africa (in the German sphere) which has clicks—the Sandawi. But this, though it may be a relic of extremely ancient days, when the ancestors of the Hottentots were dwelling

in East Africa, is not at the present time spoken by a people offering



275. A PYGMY WOMAN OF THE MULESE STOCK, UPPER ITURI

marked physical resemblance to the Congo Pygmy or to the South African Hottentot.