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*Preliminary Report of the Mackie Ethnological Expedition to  
Central Africa.*

By the Rev. JOHN ROSCOE.

(Communicated by the Mackie Anthropological Expedition Committee.  
Received February 15, 1921.)

[PLATES 12-16.]

At the outset I realised it would be impossible to find the right men in England to join the expedition, owing, firstly, to the fact that the men whom I should have liked to accompany me were only then returning from France, and secondly, because of the expense. I therefore set out alone, hoping to find at least a photographer and a typist either in Mombasa or in Uganda.

At Mombasa it was impossible to find any man suitable for my purposes, so I journeyed on to Nairobi and spent a week there seeking men; but here again failure forced me to go on to Uganda. In Uganda I thought I was securing the men I required, but I soon discovered they were not suited to my purpose and had to be dismissed.

In Uganda a month was spent at Kampala making enquiries into some of my past work and correcting some things in my former book on the Baganda. There were also men to be interviewed and engaged; but, over and above these matters, I was entrusted by the Government with the task of looking into some native questions which called for attention. I was engaged investigating native secret societies during the whole of the expedition, and it was only at quite the end of the time that I was able to give a satisfactory account of them to the Government authorities.

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From Kampala the expedition went in a westerly direction to Ankole (see the outline map), where it was purposed to make the first researches. It had been my intention to return to Kampala from each district, work up the materials there, and send them home. I found this was not feasible, and therefore decided when in Ankole not to return to Kampala again, except for a brief visit to see the Governor.



In Ankole my attention was devoted to the pastoral tribe known as the Bahuma, which is the descriptive term used in that part of Africa for the pastoral people. I found the Bahuma were of the Hamitic stock, and that they had entered into the country some hundreds of years before and had lost all traces of their original home. They could only say they came from the north-east. They still strictly abstain from intermarriage with any

of the tribes who are not of the same stock, and adhere to a milk diet. This tribe contains the purest set of pastoral people in all that part of Central Africa. Numbers of the lower classes in the country districts observe a pure milk diet and abstain from eating any vegetables or any butcher's meat except beef, and after eating beef they abstain from drinking milk for some twelve hours. Here the idea of transmigration was common, the king being supposed at death to become a lion. (Figs. 1 and 2, Plate 12.)

I found that the king's sister, though called the queen, was permitted to marry, and the other princesses married chiefs of their own tribe, though they are careful to find a husband from another clan. This custom differs from that of the other pastoral tribes, where princesses are forbidden to marry. Throughout the country there exists clan exogamy, and descent is reckoned through the male line.

Marriage is chiefly contracted during infancy, the arrangements being made by the parents of the two children. It was strange to find that, though the people are on the whole a monogamous tribe, there are many instances of polygamous marriages, especially if the first wife is sterile. Again, there is the practice of polyandry, owing chiefly to economic conditions. A man who wishes to marry and finds he is unable to provide the necessary amount of milk for himself and wife, will invite one or more of his brothers to join him, and together they will marry a wife. The woman does not object to the multiplicity of husbands. The children born are reckoned as the sons of the eldest brother. Another strange marriage custom is, that when the husband's father visits his son, the son will vacate the house and leave his wife for his father, who takes possession of the house and his daughter-in-law.

There is a firm belief in ghosts, and numbers of cows are devoted to the ghosts of men. The milk from these animals is daily placed before the shrine for the ghost's acceptance, and later the man, with his children, will take a sacred meal in the ghost's presence. Thus twice daily there is a communion with the dead.

The customs of the agricultural people in this district were also found to be instructive. These are the aborigines, who are called slaves by the pastoral people. They do the work for their superiors, such as tilling the land, herding goats and sheep, and keep their fowls. Goats and sheep are used for trading purposes to buy salt for the cows and weapons for the men, and fowls are wanted for divination. The customs of the agricultural people differ from those of the pastoral people, though the former seem to have adopted many of the customs of their masters. (Figs. 3 and 4, Plate 13.)

The ethnologist soon learns that in the district, now known as Ankole,

there are two or three tribes of the Hamitic stock, who, through the British occupation, have been merged into one nation.

From Ankole the Expedition passed further west to the district known as Kigezi, which stretches to the Belgian Congo on the western side, and is bounded by Ruanda on its southern side. This is a mountainous country, occupied by several tribes. The most populous tribe is called Bakyiga. These are agricultural: they cultivate the sides of the mountains and also possess large herds of cows. They are a wild people, strong and fearless. They have never submitted to the pastoral people, though I found the pygmies had driven them back from one part of their country bordering on the Congo. The mountains in this district are very fine, and there is an active volcano, known to the inhabitants as Bufumbiro, which means Cookhouse.

While studying the Bakyiga one was struck by the similarity of their customs to those of the Bagesu on Mount Elgon. It was impossible to obtain any information as to their past history: they stated they knew nothing of themselves beyond their grandfathers' time. They have no over-chief, and no method of recording events could be discovered. I found they buried their dead near their huts, and there is no trace of cannibalism. In this they differ from the Bagesu, who are ceremonial cannibals and eat their dead. The disregard for life is very marked, and the clans are so hostile that it is unsafe for a man to leave his home and walk a mile into another district alone: he would be speared to death when he crossed the border.

When a man wishes to marry, he asks one or two friends to help him to find some young woman engaged in cultivation; the party then lie in ambush until she is alone, when they kidnap her and march her off to their home. From a hill they call to the girl's father, and tell him to come and take the dowry for his daughter, who is now to be the wife of such a one. Should the brothers of this woman meet a brother-in-law, they do not hesitate to murder him. There is no bond of relationship through marriage. Deeds of violence are common; I saw an instance during the few days I spent in the district. A man wounded a clan brother of the same village, who wanted to sell him a goat for a higher price than he wished to give. The purchaser marked his disapproval by thrusting his spear through the thigh of the seller of the animal.

I also heard that murder was quite common, even though the punishment is severe. Two murders were said to have taken place a few days before my arrival. In each case the murderer, after being bound hand and foot, was tried, and, when proved to be guilty, was buried alive under the corpse. When I reached Mount Elgon, some months later, and was making enquiries among the various clans of Bagesu, I found a clan calling themselves

Bakyiga, and was informed by them that a part of their clan had migrated and gone south, and had not since been heard of. In all probability, the Kigezi tribe of Bakyiga is the missing clan, who have modified some of their customs.

Passing along the eastern side of Lake Edward, the expedition met with numbers of pastoral people, some of them with very large herds, which had not then been affected by rinderpest, which was devastating Ankole. When nearing the river which connects Lakes George and Edward, a tribe of Baganda was met with. These men were obliged to leave Buganda, because their chief had killed a prince in battle. At the time the deed was done, his action was highly commended by the king, but later the priest warned the king that, unless he put the man to death, the ghost of the prince would cause disease in his country. The chief heard that he was to be captured, so he fled with a number of people, and, passing through Ankole, settled near Lake Edward. There he and his relatives, with some followers, live to this day. They have adopted many customs of the surrounding tribes, with whom they intermarry.

Crossing the river we entered Toro, and I was able to see a little of the cannibal tribes of the Luenzori Range, though I only remained at the capital a week, while waiting for a steamer to carry me over Lake Albert into Bunyoro. The cannibal tribes are of the degraded kind, who will kill and eat men of other tribes.

The pastoral people of Toro are an offshoot of the Banyoro, and on this account there was no necessity for staying among them to learn their customs; I could do it better among the Banyoro. I therefore passed over Lake Albert and spent four months in Bunyoro. In this part of the Uganda Protectorate I did some of the best research work. The king was anxious to help forward the cause, and took great trouble to secure for me the best informants. Not only did he procure these for me, but he gave a week's pageant of the old milk customs, when from morning until night were enacted the old ceremonies. After this I was with him a month, spending many hours each day while he explained what I had seen, and gave information which he had obtained from other old people, some of whom were present with us during these interviews.

The king in the past was the high priest, or perhaps it might be said that he was the Deity, for so he was regarded by the common people. Each morning, before he rose from his bed, a girl, who had to sleep across the foot of the bed, lest the king's feet should come against the bed frame or be exposed, had to anoint each great toe. After this the king went into a yard near the throne room, where two yearling bulls, one a black animal with a

white spot on its forehead, the other a red and black animal with a white spot on its forehead, were driven to him. The king took the black bull by the horns and uttered a few words, laying upon it any evil of the night; he then took the red and black bull in the same manner, and uttered a few words of blessing on the dawning day. After this he performed his cleansing ceremonies amid fetishes; he next went to see the sacred cows milked. The men and maids who performed this duty had to be ceremonially clean for two days before they entered upon their office; faces, arms, and chests were whitened with clay. So solemn were the duties, that they were able to carry them on for two days only, when they were relieved by another set of milkmen and maids.

When the sacred milk was ready for the king, another dairy-maid announced the fact, and the king rose from his throne, and withdrew into the dairy to drink. When he rose from his throne, the guard at the door proclaimed the fact that the king was going to drink milk; and men and women, within the royal enclosure, knelt and covered their faces. They might not cough nor clear their throats during the time the king was drinking milk, on pain of death. When he returned, the people rose and went about their usual avocations. (See Figs. 5-8, Plates 14, 15.)

A similar custom was observed when the king took his meal in the afternoon. Then the royal cook, who, like the milkmaids, was purified, and had his face, chest, and arms whitened, came into the king's presence, with a pot containing beef from an animal of the sacred herd. The beef was cooked and cut into small pieces ready to be eaten. The cook took a two-pronged fork, which he held in his hand, knelt down before the king, dug the fork into a piece of meat, and put it into the king's mouth. Four times he did this; and, should he by accident touch the king's teeth with the metal, he was put to death on the spot. In the evening a herald announced that the sacred cows were coming, and people fled on all sides, and covered their faces until the animals had passed. The king sat while two animals were milked, and again drank the ceremonial milk. At other times during the day the king might drink milk without ceremony, but he must not eat meat.

In later days, when the kings began to eat other food, they did so by stealth; they took it standing in a hut in a courtyard, where no outside person could see or know the king was having a meal. The food was cooked outside the royal enclosure, and carried in as though it was intended for the servants, and was kept ready for the king, who would escape from his court and priestly duties for the meal. By night the king prowled round his enclosure with one of his pages until quite late. He slept during the early hours of the morning in the hut of a wife, but always completed his rest in the court house in a royal chamber.

There was a royal guild to which chiefs were admitted by a customary rite of drinking sacred milk; after which they were given a crown to wear. So solemn was this rite, and so much dreaded, that chiefs who were admitted often fainted during the ceremony under the strain. When admitted, they became a trusted body united to the throne by special ties.

When a chief died his death was announced to the king in the following manner; the relatives chose two or three of their number to go with a cow, in the early morning, to the entrance gate of the royal enclosure. The men drove the cow to the gate at a run and shouted the name of the dead person saying "Death has robbed you"; they then turned and fled for their lives, because, near the gate were guards, belonging to the chief who had charge of the king's tombs. The guards charged after the fleeing men and, should they catch one of them, they killed him on the spot. The guard then returned, caught the cow in the roadway, and killed, cooked and ate as much of the animal as they could before the sun rose. Any meat, bones or offal remaining at dawn was buried before the sun shone upon it, and the place was cleaned. The custom when a son is acknowledged to be heir to property is also of interest; the king was apprised and gave his consent to the choice. The man must then appear in the king's presence and go through a form of allegiance, before he enters on his inheritance.

The annual custom when a man, chosen from a particular clan, is sent to personify the late king and to reign in his tomb, is worth noting. The man sits in the tomb as king and has full use of the widows; he distributes royal favours during the week he reigns, and is then taken to the back of the tomb and strangled.

From Bunyoro the expedition went to Soroti, on an arm of Lake Kioga nearest to Karamojo. It was my desire to pass through Karamojo to Turkana, and on to the Galla tribe near Lake Rudolf. In this I was disappointed owing to tribal disturbances. It was considered unsafe to go without an armed escort; and as that would have thwarted ethnological research, I decided to go to Mount Elgon, passing through the Teso country, and keeping south of Lake Salisbury. A few customs were studied among the Bateso and Bagesu, who are naked people, and whom I found to be ceremonial cannibals.

Hearing there were initiation ceremonies being performed by the Bagesu on Mount Elgon, I pushed forward to be in time to see them. In this I was successful, though it required some tact and persuasion to be permitted to see the actual circumcision rites. The details of these customs are harrowing; they call for great fortitude on the part of the candidate. The youths are worked up for days to a high state of nervous resistance. On the

day of the ceremony they undergo strenuous exertion, and are fortified for the ordeal by a special meal and native beer. After this they take the oath of tribal allegiance by jumping upon an egg, and then stand as though unconscious of any pain, while the operator saws, with a large knife, the flesh from the whole of the member and casts it under the youth's feet. (Figs. 9, 10, Plate 16.)

These Bagesu do not bury their dead, because they think the ghost will kill the children of the family should they allow the body to decay. The corpse is thrown out after dark, when men go out with trumpets made of gourds and imitate the cry of jackals; meanwhile a number of old women proceed to cut up and carry back the corpse into the hut of mourning. There, during the following three days, the mourners eat the body and wail.

From the Bagesu we proceeded up Mount Elgon, round to the most north-easterly point, to investigate the caves which are said to have been inhabited formerly. These caves are still used from time to time; we visited three of them, but could find no traces of permanent habitation. Report says that, before the British occupation, they were used frequently as places of refuge during any raids made by people from the north. The raiders were evidently Turkana and Abyssinians.

While on Mount Elgon the customs of the Sabei were studied, and I witnessed some of their marriage dances. A discovery was made with regard to the two sets of pastoral peoples, both of them evidently from the same Hamitic stock. Here was the dividing line: the Masai, Turkana, Nandi, and Somali tribes have the rite of circumcision when the youths are initiated, and the women undergo a corresponding rite; whereas the pastoral people in the south will not submit to any such mutilations. These two sets of people are also most hostile the one to the other. The pastoral people of the south seem to be the older immigrants.

On the upper parts of the mountain there was found to be a tribe of trappers living, whose diet is mainly moles and rats and the young shoots of bamboo. They obtain a certain amount of grain by barter with members of other tribes in exchange for their dried mole flesh.

Retracing my steps to Mbale, the Government station for the district, I found, before descending to the lower slopes of the mountain, a tribe who call themselves Bakama. The name interested me, and I set to work to investigate who they were. I found them to be an offshoot of Bunyoro smiths, who had migrated and adopted the customs of the mountain pastorals, with whom they intermarried, thus becoming a separate clan of those people.

The expedition then passed to the east of Mount Elgon, in company with the Provincial Commissioner, and came round to Jinja. While in Busoga it

was possible to make notes on the Basoga, and to work my way back to Lake Kioga. From the most easterly point of the lake I took a steamer and reached Bunyoro again, to commence the journey down the Nile.

During this time I had been fortunate enough to find someone in each tribe who knew one of the languages I spoke, and I could thus obtain my information at first hand.

We crossed to the north of Lake Albert to Nimule, and journeyed 120 miles on foot to Rejaf, where I discharged my boys, and came on to Khartoum alone.

At Rejaf I had the great advantage of being with the Rev. A. Shaw, of Malek, who is conversant with the tribes contiguous to the Nile; and through him I learned much that was useful as we passed down the river. The information thus gained inclines me to think that the various Sudan pastoral tribes, commonly called Nilotic, are closely related to the pastoral tribes of Central Africa. Here and there I saw, or learned of, customs which I had also met with among the Bantu pastorals. It is important to record the tribal customs of these Nilotics before they become contaminated by western ideas or Muhammedanism.

From Khartoum I went to Cairo and thence returned home.

The expedition was undertaken chiefly to study the pastoral tribes of Ankole, Bunyoro, Karamojo and the Gallas. It was hoped to obtain details of the social anthropology which would be of value to science and to the Government, especially in regard to customs affecting land tenure, inheritance, marriage and birth.

It was realised that the natives would benefit if such customs could be reduced to writing and made available for Administrative Officers and Missionaries. I departed from England on June 14, 1919, and returned on November 15, 1920, so the work may be said to have occupied seventeen months.

It will not, I hope, be out of place to put on record the debt owing to Sir James Frazer, through whose untiring energies interest was aroused which resulted in the expedition, and to thank Sir Peter Mackie, who not only provided the funds necessary for the expedition, but also relieved me of much of the preliminary labour of organisation. His active help was also given throughout the months I was in Africa.

Mr. Wellcome was good enough to supply me with medicines for the expedition. These I found of great value, both for myself and for my men.

Of those who helped me in Africa I should like to thank the Governor of Uganda and his staff for their kind and courteous help, and for the many tokens of personal interest I received at their hands.

# DESCRIPTION OF PLATES.

## PLATE 12.

- Fig. 1.—The king of Ankole, who is noted for his height, being about 6 feet 7 inches. The staff or sceptre he holds was handed to him each morning; he first put it to his forehead and then to each shoulder to destroy any magic or other ills of the night.
- Fig. 2.—Ankole royal drums. Drums were not used in Ankole. These drums, said to have been brought by an early king, were held to possess spirits. They were kept in a temple and had a herd of cows devoted to them. Votive offerings were made to them of cattle. No cow might be killed or removed unless the spirits consented. The sanction was obtained by the priest by augury. Each morning and evening milk was offered to the drum spirits, and after it had been some time before the drums, and the spirits were supposed to have taken the essence, the priests drank the milk in the temple.

## PLATE 13.

- Fig. 3.—Medicine-men exorcising a ghost. These men laid the patient on his bed, and, after using incantations over him, they made incisions on his chest and forehead, and rubbed in powdered herbs. One of them chewed certain herbs and expectorated the juice into the mouth of the patient, while the other man sang incantations and used his rattle over him.
- Fig. 4.—Pots used as drums for dances. The water-pots are beaten on the mouths by flat leather pads, the different sounds being obtained by various amounts of water being poured into each pot.

## PLATE 14.

- Fig. 5.—Bunyoro milk customs. The king had a herd of nine sacred cows; two were milked for his special use, the others were wanted for milk for ceremonial uses, and also to give to favourite wives. The milk was kept in the dairy, where the king went at stated times to drink it. The men and women engaged in this work were purified for their office.
- Fig. 6.—Bunyoro. When the king retired to drink the sacred milk everybody in the royal enclosure knelt and covered their faces. Should any sound be heard, especially that of clearing the throat, the culprit was put to death. When the milkmaid handed the pot of milk to the king she screened her eyes with the cover of the pot, while with her other hand she used a fly-brush, waving it to keep off insects.

## PLATE 15.

- Fig. 7.—Bunyoro. Type of cowman who milks the sacred cows; during the time of his office he may not see or speak with ordinary men from outside the kraal; during the milking he must avert his eyes to avoid seeing the milkmaids.
- Fig. 8.—Bunyoro new moon dance. With each new moon there is a festival lasting nine days. During these ceremonial dances some solemn rites are performed, such as admitting members to the sacred guild, trying members of that body who have offended, and sentencing them to death or acquitting them.



FIG. 1.

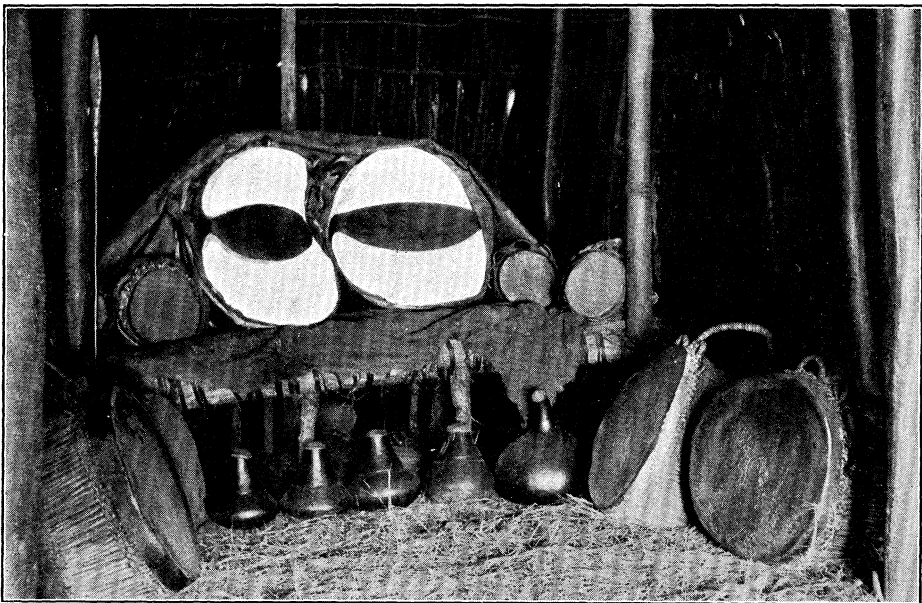


FIG. 2.

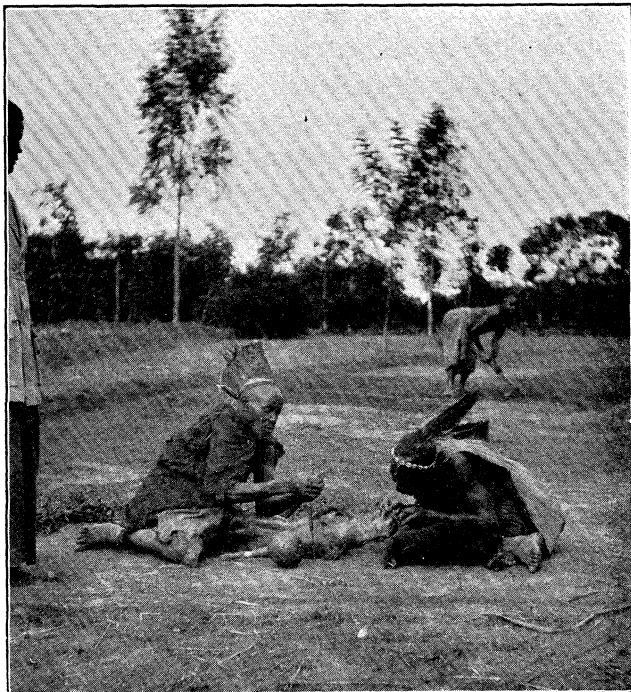


FIG. 3.

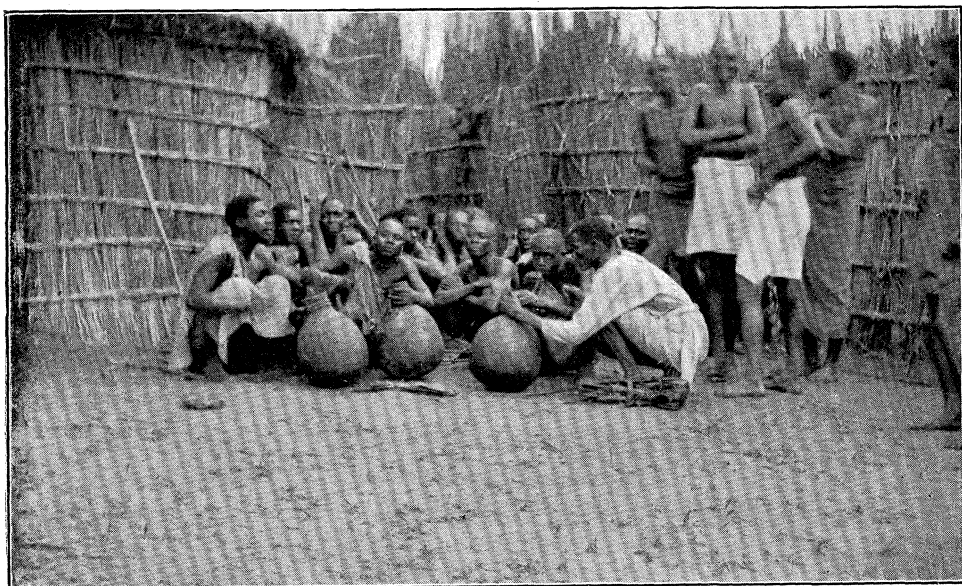


FIG. 4.

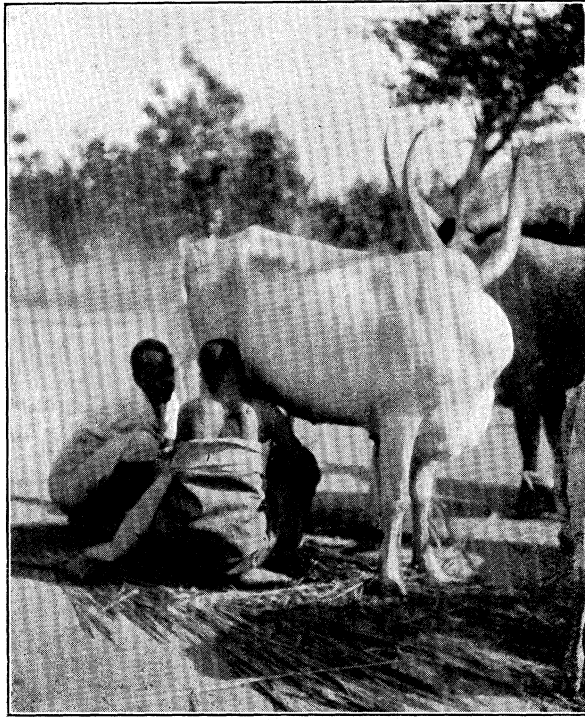


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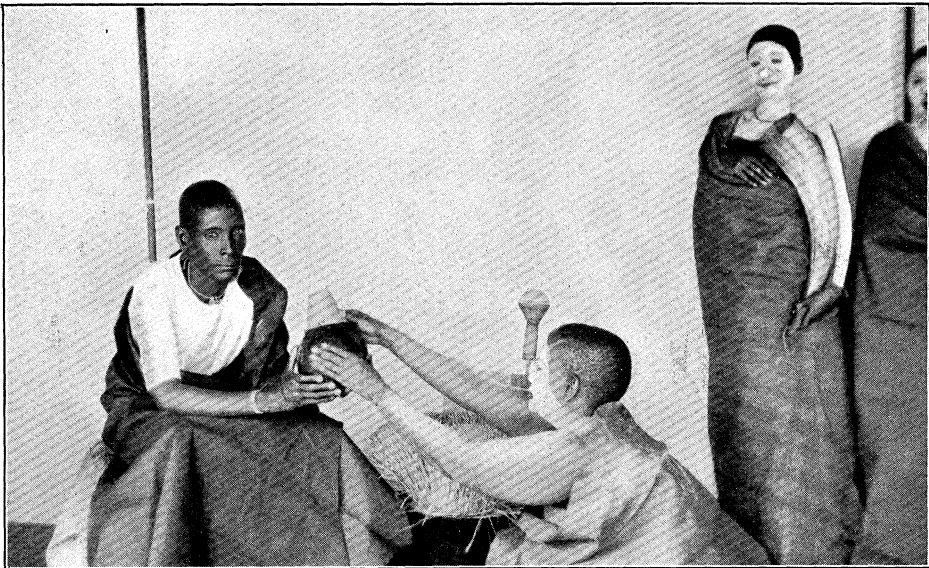


FIG. 6.

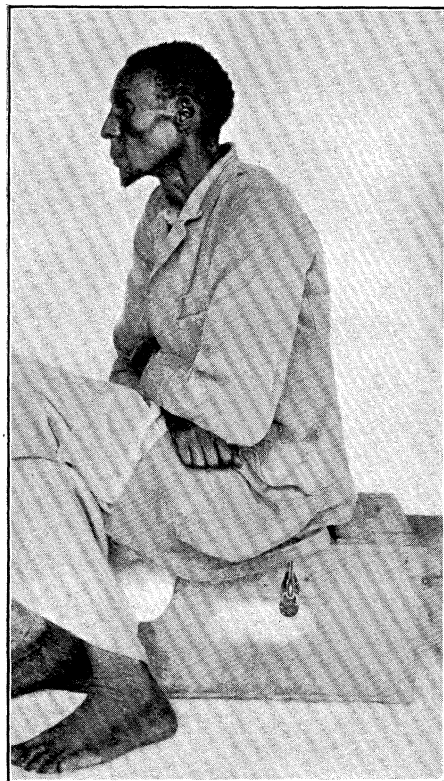


FIG. 7.



FIG. 8.

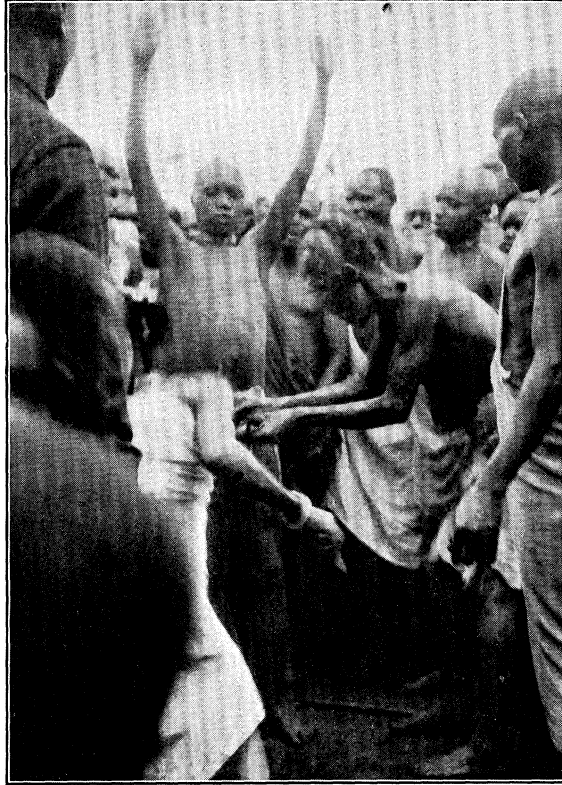


FIG. 10.



FIG. 9.

PLATE 16.

Fig. 9.—Mount Elgon Initiation Rites. Before the initiation ceremony the young men perform dances at various villages and receive gifts for the circumcision feast. On the day of the ceremony, before the event takes place, they go round the village and drive out hostile ghosts supposed to be lurking round.

Fig. 10.—Mount Elgon. During the operation of circumcision the patient stands with arms extended upwards, and must show no sign of timidity. Should he either utter a sound of pain or move a muscle he is branded a coward. Shame will force such a youth to commit suicide rather than face his companions afterwards.

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*A Quantum Theory of Colour Vision.*

By J. JOLY, Sc.D., F.R.S.

(Received April 8, 1921.)

In a paper on the subject of the Quantum Theory of Vision, issued in the 'Philosophical Magazine' (February, 1921), I dwelt on the view that the sensation of light is in every case stimulated by the action of photo-electrons set free in the retina. Further, the energy of the photo-electron being proportional to the frequency of the light, the strength of the stimulus produced is the all-sufficient origin of colour sensations. That *colour* is entirely a cerebral phenomenon is evident. Light, visible and invisible, consists of a uniformly graduated series of wave motions or energies. There is nothing to distinguish one part of the spectrum from another save the difference of wave-length or frequency. But objects in Nature react differently towards these waves: absorbing some, reflecting others, and so the selective effect of natural objects towards light has discovered to the organism a means of improving on mono-chromatic vision: a means of distinguishing objects by their selective absorption and reflection. Our colour sensations were developed solely for this purpose and solely under the influence of the light reflected by natural objects. Hence, a limited number of fundamental sensations being the simplest, if not indeed the only, way of securing the desired end, we would expect that these sensations would be developed so as most effectively to interpret the frequencies met with among natural objects reflecting solar light. The evolutionary development of three highly developed colour sensations according to the extreme and mean regions of the spectrum is the result. Colour sensations, *i.e.* (white), red, green, and blue were evolved, whereby the whole gamut of the spectrum can be dealt with.

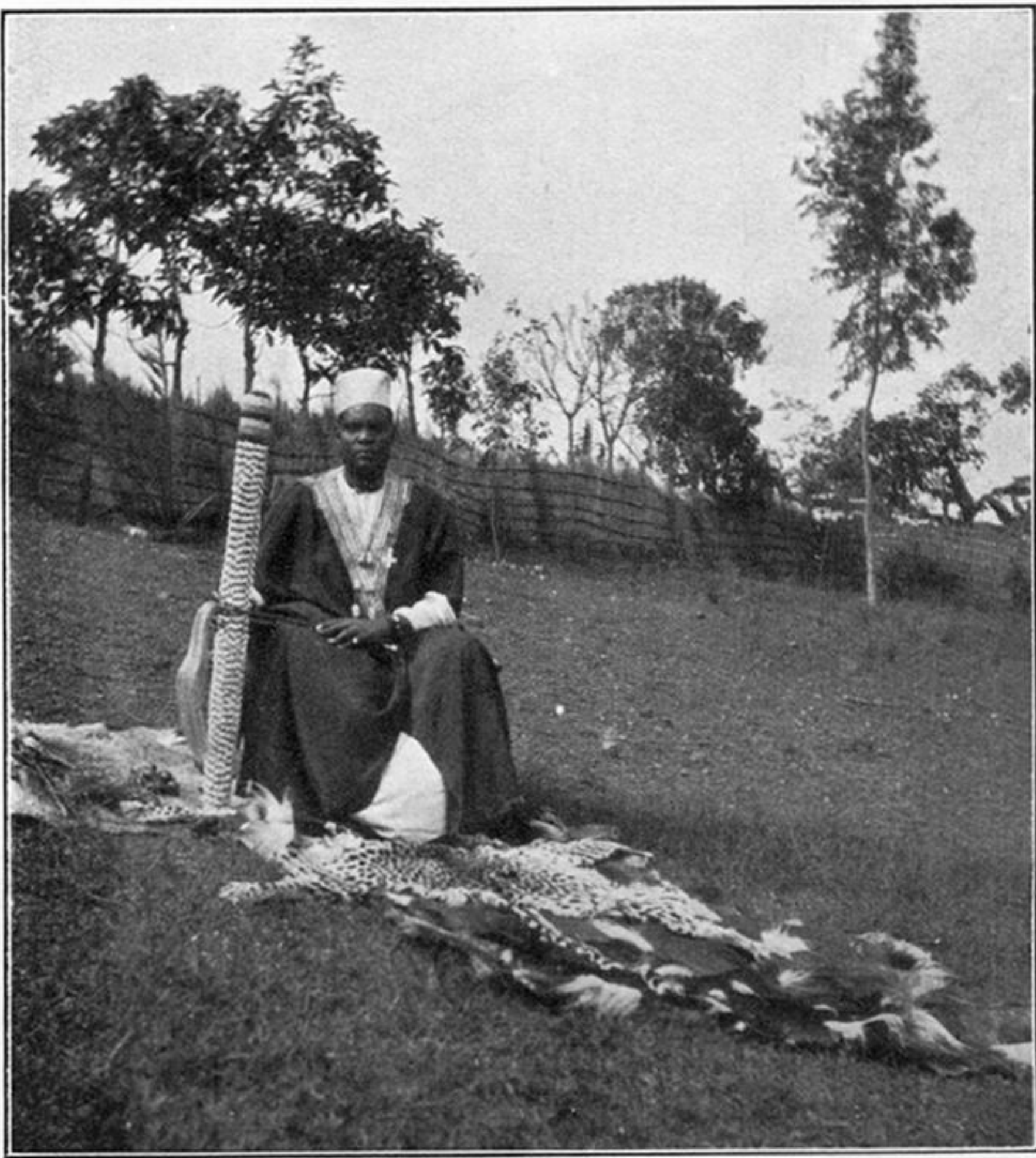


FIG. 1.

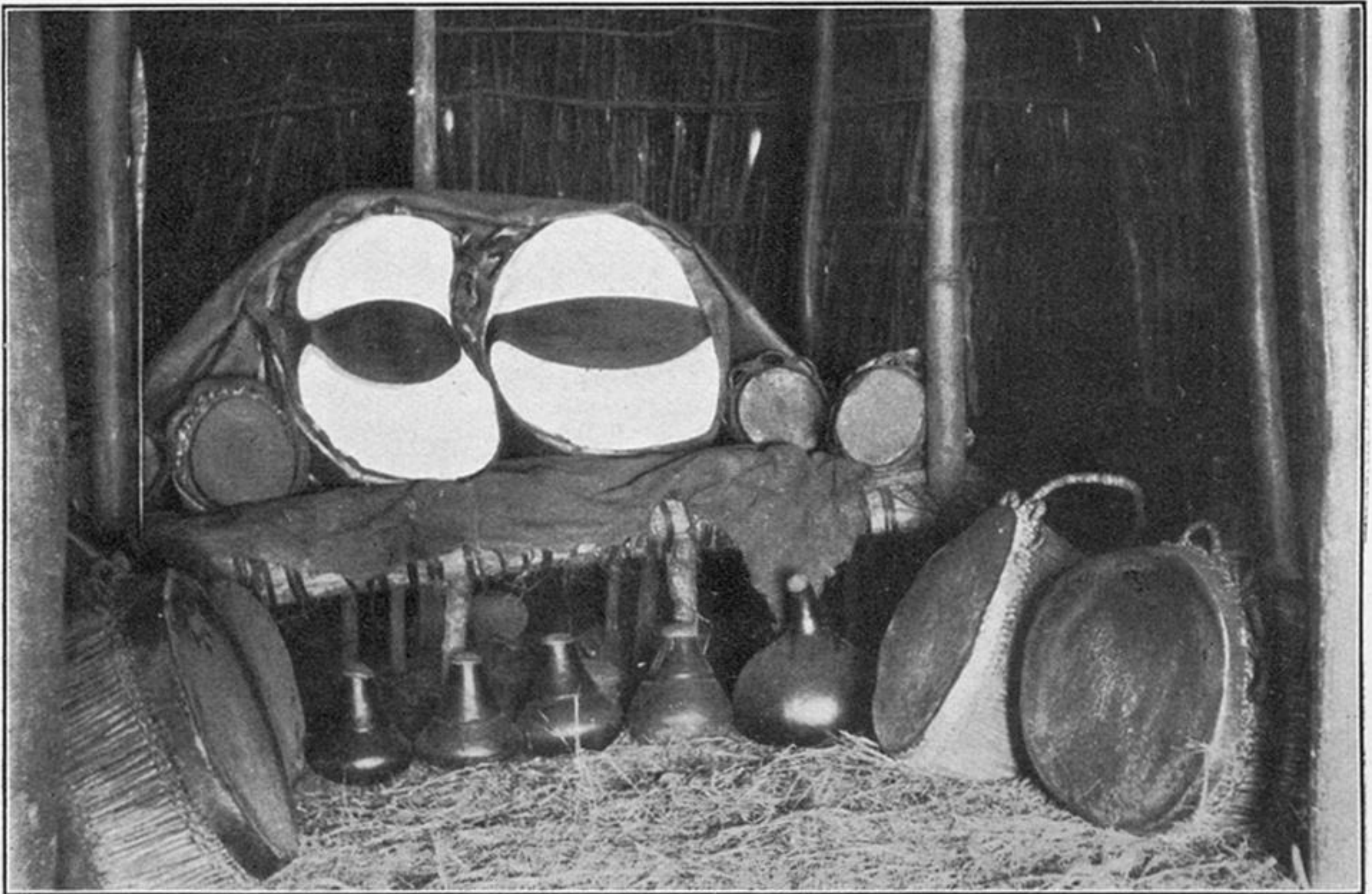


FIG. 2.



FIG. 3.



FIG. 4.

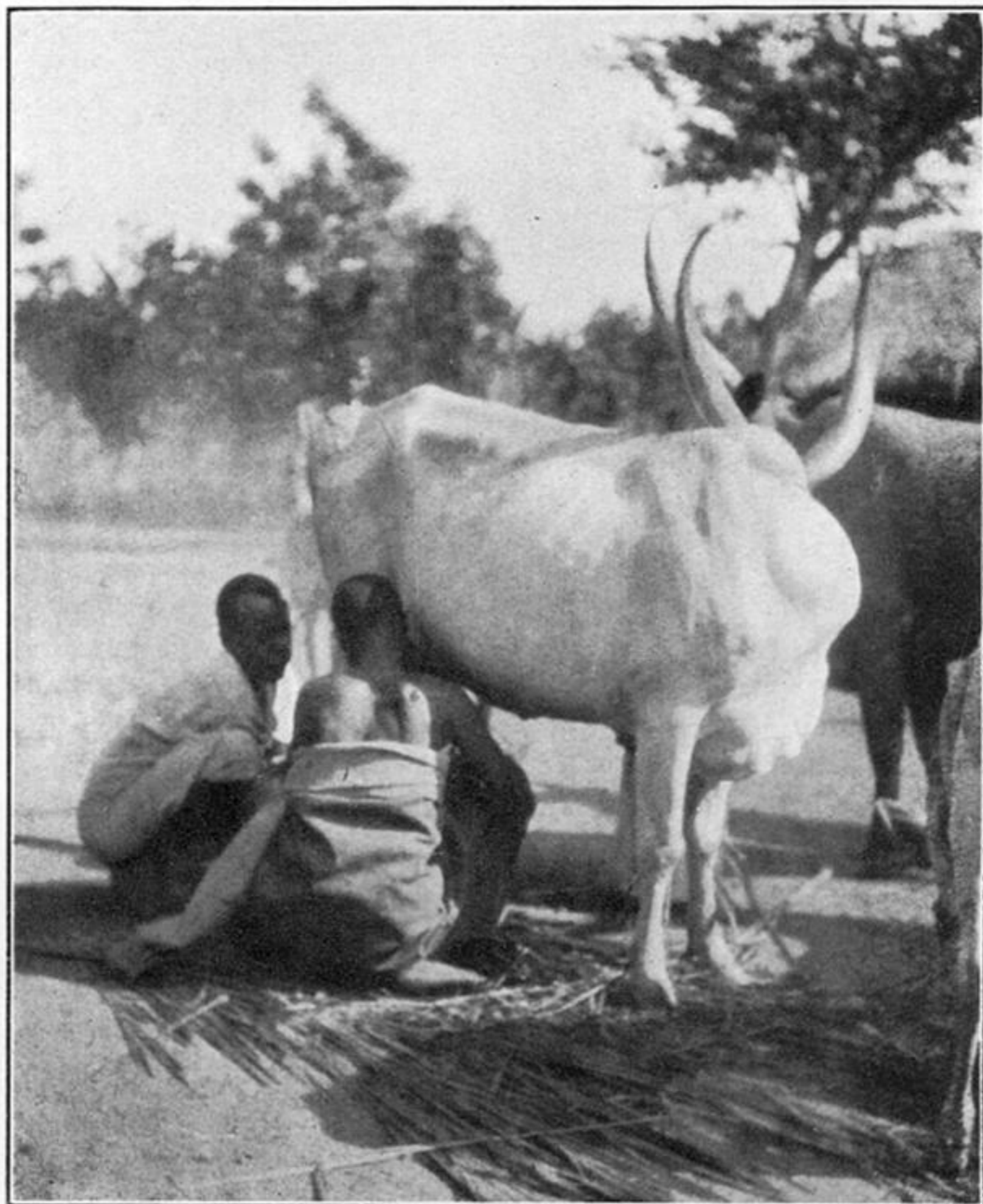


FIG. 5.

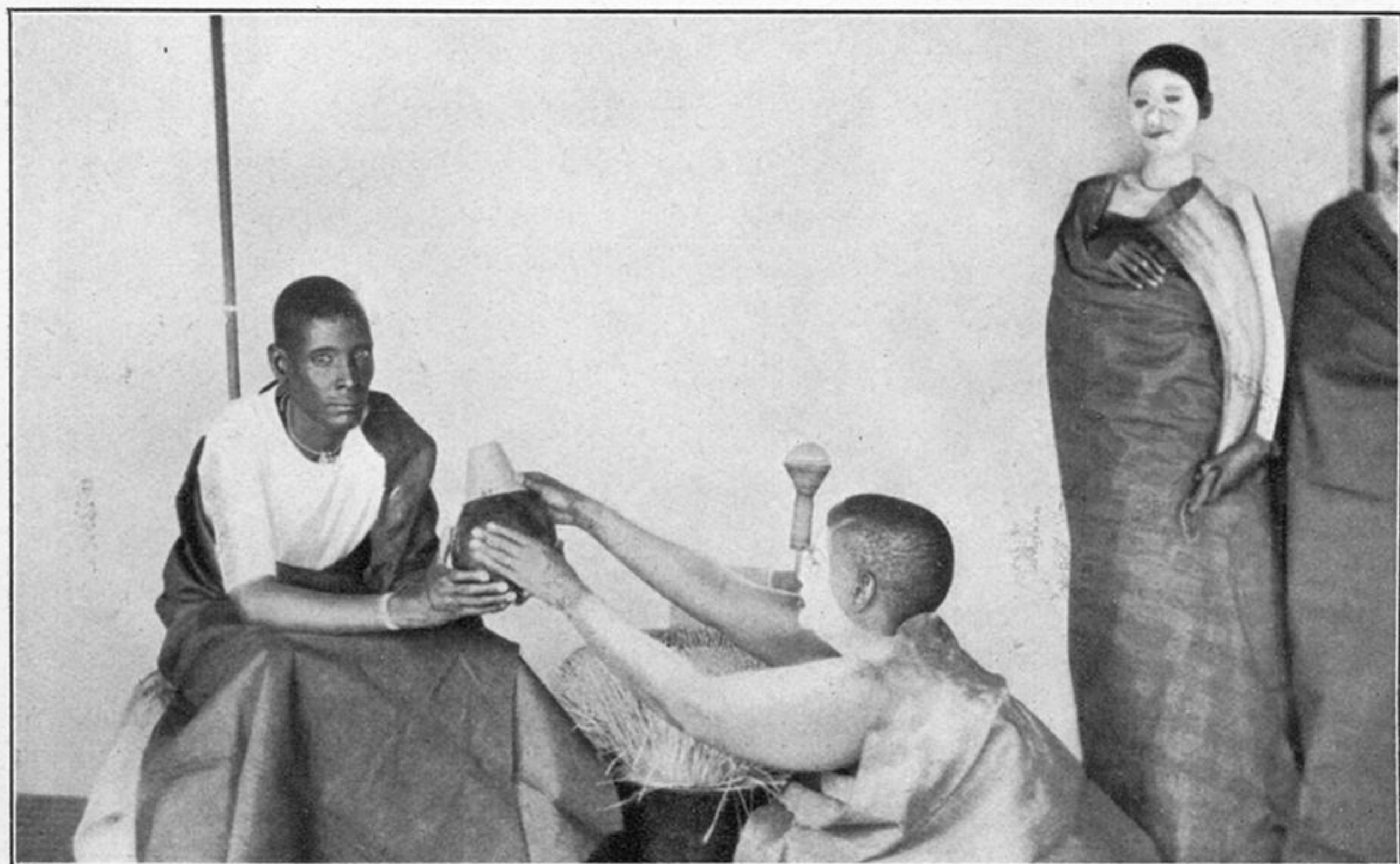


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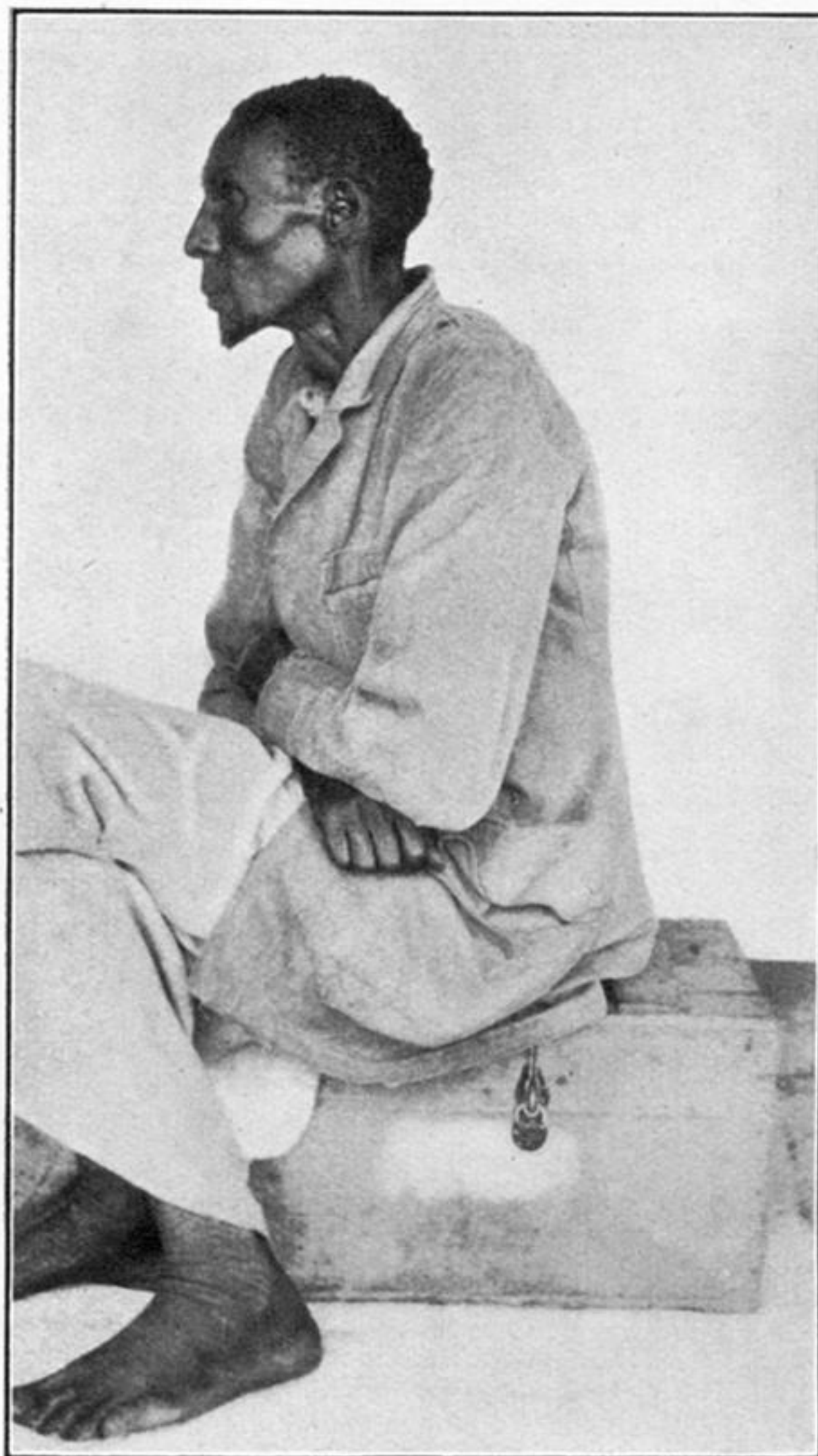


FIG. 7.



FIG. 8.

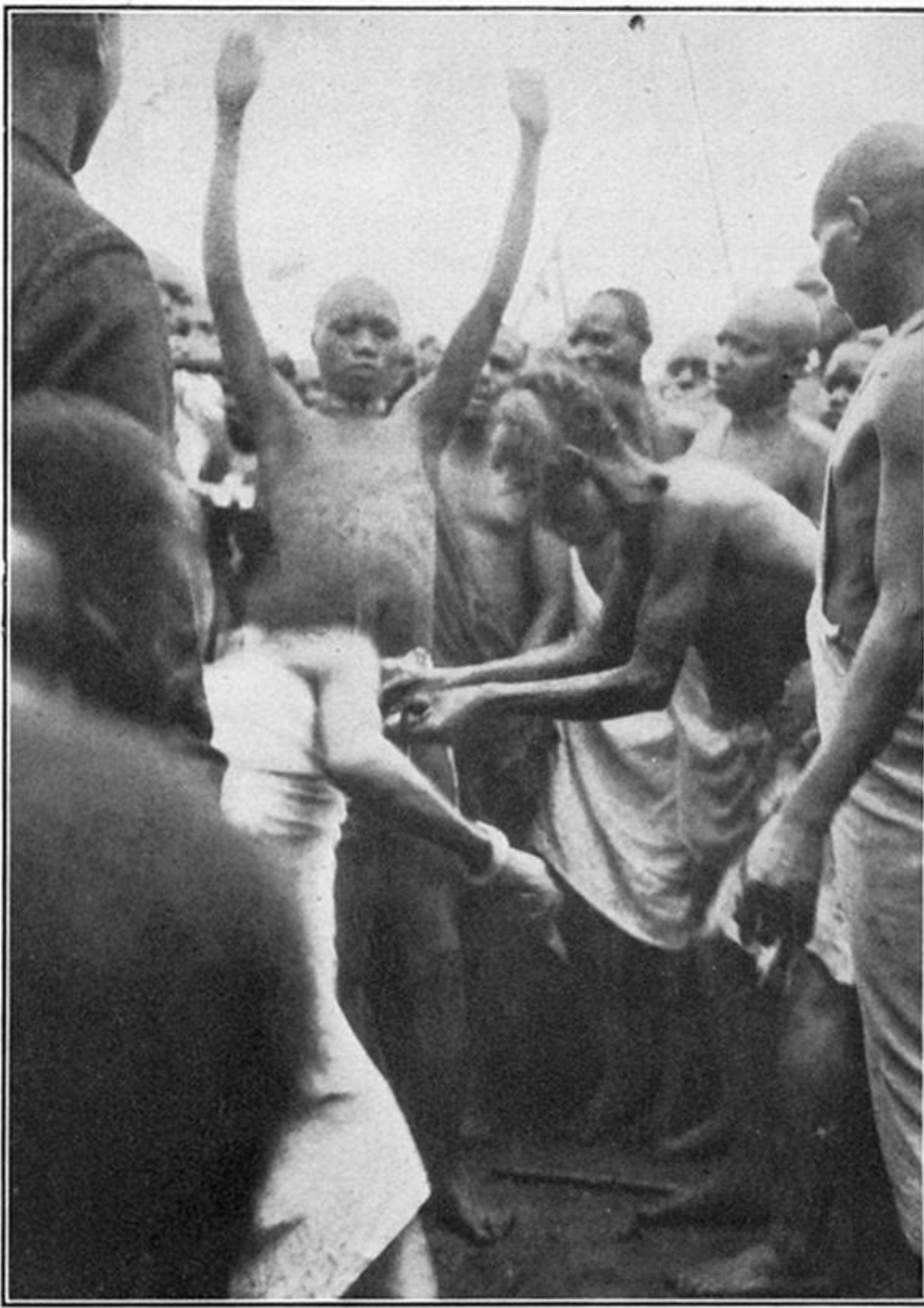


FIG. 10.



FIG. 9.