

SOME ASPECTS OF NANDI STOCK-RAISING.

By G. W. B. HUNTINGFORD.

(Paper read at the 3rd Annual Scientific Meeting held in Nov., 1933.)

§ 1. CATTLE AS PROPERTY.

It is a matter of common knowledge that the Nilotic and Nilo-Hamitic peoples regard cattle with veneration and affection, and transfer the former feeling to things like grass, milk, and dung which are intimately connected with cattle. But while these things are more or less sacred, it does not appear that the animals themselves are so regarded, though they receive as much care and attention as people, and a good deal of trouble is taken to assure their welfare. Such at least is the theory that seems to be current concerning the East African cattle-owning tribes. How far it is correct when applied to the Nandi will appear in the course of this paper, in which we shall consider chiefly the practical aspects of stock-raising, and the management of stock as carried out at the present day, without regard to such questions as the supposed psychological "identification" of the owner with his cattle¹, or more remote considerations like the worship of the bull in ancient Egypt.

One of the most noticeable things about the Nandi is the use of personal names derived from cattle: a man who has acquired a cow at the time a child is born to him will call it after the cow; and another phenomenon (common to many cattle-tribes, and found also to a limited extent in Europe) is the use of special words in connection with cattle. Thus, apart from the terms applied to cattle at different ages, like calf, heifer, cow, there are distinctive words used only of cattle in everyday language. For example: there is a word meaning "to lead," but two other distinct words are used of leading cattle and goats. The different parts of cattle have also special names, as well as their natural actions: there are two separate words meaning "dewlap," one referring only to cattle, the other to sheep and goats. This terminology emphasizes the fundamental importance of cattle in Nandi life: for their animals are actually the beginning and end of everything in their eyes. One tribal name, too, brings this out even more forcibly. The Moi clan, the largest of the Nandi genealogical divisions, derives its name from cattle, for moi means "calf," and the three subsidiary names of this clan all refer to cattle²: its clan-animals are the buffalo and crested crane, which the Nandi call "daughter of the calves' ears" in allusion to the ear-cutting of calves by this clan. These facts are of some sig-

¹ Reported of the Dinka: see Seligman, "Races of Africa," p. 175.

² Rarewa = heifer; Kâparitkisapony, from parit = cow with cut ears, and pony, = bushbuck, the skins of which the Moi may not wear; Kâpartatukasôs, where tuka = cattle, and sôs, archaic plur. of soen = buffaloes. (J.R.A.I. lvii. 429-31.)

nificance, because it seems that the *Moi* is the oldest of the clans; and the names for it appropriately record the importance of cattle: none of the other clan-names refer to them.

Cattle to the Nandi are wealth; and the ancient saying "cattle are the foundation of all wealth"³ applies with greater force to savages who own nothing else than to civilized people who are not dependent on one industry or occupation. For cattle are at present the only form of personal property the Nandi have, and till quite recently formed their sole industry, their main support, and their only stimulus to action—this last taking the form of increasing their herds at other people's expense. The settled life led by East African agricultural tribes is not conducive to mental or physical exertion; cattle-raiding does stimulate to a certain extent; and it is not impossible that the somewhat higher intelligence of the pastoral tribes is due to the fact that this action has kept them from the stagnation into which their Bantu neighbours have sunk. Yet this intelligence, while it undoubtedly exists, is not always directed to practical ends even where cattle are concerned. Grass, being the food of cattle, is sacred, and therefore (till quite recently) men did not cut it, but left that work to women, showing thereby a good deal of sense in avoiding a distasteful work. But dung, which is produced by cattle, is also sacred, and is therefore used to plaster wounds and sores: here we have no intelligent choice of a remedy, for although there may be some healing properties in dung, it is not used for that reason, but simply because it is produced by cattle, and it is of value on that account alone.

As property, cattle belong to the whole tribe, living and dead, a fact which does not seem to be generally realized, and which is partly responsible for raiding and stock-theft. If cattle are lost, whatever the cause may be, they must be replaced at all costs, for otherwise the spirits of the dead will be angry, and their vengeance is one of the things that the Nandi, like other savages, fear more than anything else. Individuals can acquire cattle, by theft, purchase, or as "bride-cattle,"⁴ which are their own property during their life-time; but after their death, though inherited by others, they are only held in trust for the dead, and cannot be disposed of in the same way as acquired cattle.

§ 2. THE MANAGEMENT OF CATTLE.

Taking cattle as an industry and occupation, we shall now consider their management, which from the Nandi point of view falls into 5 main divisions: herding, milking, housing, parturition and bulls. These indeed are the absolutely essential parts of stock-farming: and when we have included, as part of the herdsman's work, the provision of salt,

³ "Omnis pecuniae pecus fundamentum," Varro., *Res Rusticae*, II, 1. § 12.

⁴ See my notes on "Bride-price" in this Journal, No. 45-46, pp. 52, 53.

it will be found that the Nandi restrict their work to the essentials, and do not, for the most part, trouble themselves further. Being the main industry, the herding of live-stock is naturally the chief occupation of the people, even in these days of agricultural development. Herding is an end in itself: to possess cattle, and to see them day by day seems to be the highest good to which the Nandi mind can aspire, and accounts partly for the prejudice against using oxen for working. A Nandi once told me as much: if, he said, our oxen work, what shall we have left to herd? Yet years of familiarity with their cattle, and handling of them since birth, have not produced any noticeable degree of tameness in Nandi live-stock, but rather the opposite; for while the cows submit, as a rule, quietly enough to be milked, they are with difficulty handled for other purposes even by their owners. Calves and oxen are even more troublesome. The reason for this seems to be in the physical fear which many Nandi display towards their own cattle—I mean the fear of being kicked or horned—when doing anything to them, and in the lack of control they show, both over themselves and the cattle, when rounding them up; shouting, waving sticks, and running about are not the best ways of dealing with any domesticated animals.

The practical part of herding is usually divided between the owner and his relations—the precise degree of relationship is immaterial, and the caretaker is sometimes not related at all to the owner, though he is always a member of the same military division, and generally of the same clan. Some of the cattle live at the owner's homestead, while the remainder are sent out to grass in the charge of a caretaker, at whose homestead they live. Such a place where a man keeps part of his herd is referred to by him as "the cattle-place,"⁵ without a possessive pronoun; and part of his work is to visit the "cattle-place" to inspect his animals. Sometimes it is close to his own hut, or it may be many miles off; and in rare cases it is not even in Nandi, but in another Reserve (for it must not be thought that, among the Nandi tribes, a Reserve or tribal area is exclusively inhabited by people of that tribe: when all speak the same language, and have the same customs and institutions, political boundaries in peace time mean very little).

As regards grazing rights, the land is the common property of the tribe, and subject to certain restrictions, the Nandi are at liberty to live and pasture their stock wherever they like. This freedom is, however, limited by the fifteen divisions of the tribe which we may call in English "military divisions."⁶ Originally applied to groups of people which formed independent fighting units, the name in course of time

⁵ Káptich.

⁶ Pororiet, plur. pororōsiek. This is usually, though quite wrongly, spoken of as "clan"; thus we hear of "the activities of the Kápchepekendi clan," whereas there is no such clan, the name being that of a military division. As to the names, see Hollis, "Nandi," p. 4; and my notes in J.R.A.I. lviii. 432-434.

was extended to the territory of each group, and as each expanded, the newly-settled area acquired the group-name; so that the land of many of the divisions is not all in one block, but scattered in various parts of the Reserve. The occupation of land for living, grazing, and cultivation is regulated by these divisions. Natural boundaries, for the most part rivers, which are well-known to the inhabitants, separate the divisions, and in the ordinary herding of cattle, people keep to their own areas; though it is now easier for a man to settle permanently in another division than it was formerly.

The Nandi is not an early riser. Even if he believes that dew does not hurt cattle, he does not often trouble to let them out before sunrise. Between 6.00 and 6.30 a.m. is the usual time for opening the fold, and they are allowed to wander about picking up what grazing they can till about 9 a.m., when they are brought in for milking. This is done by either sex, without discrimination, though not usually by the uncircumcised. Before being milked, the calf is allowed to suck to bring the milk down. When the milker, by squeezing a few drops on to the ground, has decided that there is a sufficient flow, he ties the calf to a tree or post, and squats on the off-side of the cow to milk. Holding a narrow-mouthed gourd⁷ in his left hand to receive the milk, he squeezes the teat with the thumb and forefinger of the right hand, and causes the milk to flow by a downward, pulling movement. When he has drawn off about half the milk from the udder, the calf is allowed to suck again. Cows have the remarkable but unexplained power of withholding their milk,⁸ which makes it necessary to allow the calves to suck first; though when a calf dies, it is usually possible to milk the cow by stuffing the skin with grass⁹ and producing it every milking-time. The cow licks the skin, and they sometimes pour salt water over it as an attraction; and it seems that the animal is deluded into believing that the skin is a real calf: at any rate, she usually stands quietly enough licking the skin, and allowing herself to be milked; though the udder is seldom emptied in this way, and therefore such cows quickly go dry. Fractious cows have their hind legs tied together with a leather thong. The milking done, the cattle are driven out to graze, sometimes in the charge of a herdsman who may be a warrior, an old man, a woman, or a couple of small children; and sometimes they are left to wander where they please without supervision. As a matter of fact, herding is one of the few forms of work that appeals to a Nandi, for he can either go to sleep under a tree, or stand in the typical Nilotic posture with the sole of one foot resting against the knee of the other leg, while he whistles to his animals and meditates, or else merely stands.¹⁰

⁷ Sotet ne para-kut.

⁸ See Stephens' Book of the Farm,⁵ III. 341.

⁹ aosit.

¹⁰ Cf. the rustic in "Punch": "Zometimes I zits and thinks, and zometimes I just zits."

Twice a day the cattle are taken to water,¹¹ and about 5.30 p.m. they return home to be milked and to feed their calves; this over, they are shut up for the night in the cattle-fold, and the calves are put to bed. The monotony of herding is varied by occasional visits to a salt-lick,¹² about twice a month if there is one nearby, less often if it is far away. At Kiptoros near Kâpsabet in central Nandi there is a large salt-lick on the north side of the Kâmnetui river, occupying several acres, which serves a large area; here pits have been dug for the salt-earth,¹³ which is put into shallow troughs dug in the ground, and mixed with water. The younger animals are brought to these troughs, while the adult stock lick the bare earth, which in dry weather is moistened with water.

The housing of the cattle is a very simple matter. The full-grown animals are kept at night in an open circular fold¹⁴ made of poles fixed in the ground at intervals, the intervening spaces being filled with sticks, thorn, and brushwood. There is one entrance,¹⁵ formed of upright forked posts with a cross-bar at the top, against which, on the inner side, are stood upright poles in such a way that the animals cannot get out. The dung is removed every morning by the women, who scrape it out with their hands, using a small piece of hide to help when it is very wet, and fling it outside on to a dung-heap,¹⁶ sometimes near the entrance, though often the dung is collected all round the enclosure. The calves are housed in the owner's hut. Nandi huts are divided by a central wall with a doorway in it: in the front part of the hut,¹⁷ where the hearth is, the people sleep, together with the sheep and goats; in the back part¹⁸ the calves are put. By day, when too young to walk about, calves are kept in the hut tied with a thong to a post: when older, they wander about outside picking up what grazing they can. The Nandi do not give calves water, believing that they will get East Coast Fever if they drink; but they do not interfere if the calves find their own way to the river.

At calving-time, a bed of grass or leaves is prepared for the cow to drop its calf upon. When the calf appears, the owner, or whoever is in attendance, wipes the viscid fluid from the calf's mouth and nostrils, and stands by till the mother has licked it dry: then he puts it into the hut. In cases of difficult delivery the attendant sometimes inserts his hand to turn the calf; and in protracted cases a "cow-doctor" may be called in. These cow-doctors have actually little more

¹¹ A watering-place in a river is called taparta.

¹² ūgenda.

¹³ The value of these salt-licks is said to be very small.

¹⁴ pēt.

¹⁵ ormarichet.

¹⁶ Kâmŋgototek.

¹⁷ Koiimaut.

¹⁸ injorut.

knowledge than other people; and as a final remedy they may attempt to pull the calf out, and even to hacking off such parts as they succeed in withdrawing in the hope of easing delivery. Such methods usually result in the death of the cow. If the placenta does not come away, it is sometimes removed by hand, or else left. The Nandi have no idea that a cow wants water after calving, and so none is given, although they see the unfortunate creatures eagerly drinking from puddles of filthy water. The calf is allowed to suck all it wants for ten days or so, and during this time the cow is not milked; and it is allowed to suck till the cow goes dry, being artificially weaned only if there is not enough milk for itself and for the people, in which case the cow's udder is smeared with dung to stop it sucking. If a cow dies, her calf is fed with milk from a gourd with a leather mouth-piece; but orphan calves usually die from starvation.

The production of calves, which is the object of the stock-farmer, depends, as the Nandi are well aware, upon the bull, and the breeding of sound animals requires a certain amount of skill and care in the selection of the bull. Yet to the Nandi, one bull is as good as another, and a long-legged narrow animal is just as acceptable a sire as a short-legged thick-bodied bull: his ancestry is of no account, and colour is left to chance. And while they appreciate good animals, and do not refuse the services of a good bull if they happen to have access to one, yet the fact that their own bulls come of undersized and poor milking stock does not seem to present itself to them as something which should be remedied. And if it did, the conditions under which Nandi cattle grow up would neutralize any trouble that might be taken. Improper housing in a stuffy, smelly hut, lack of water to drink, and insufficient milk when young, combined with poor grazing, are not conducive to a sound healthy breed of cattle. The pasture in Nandi is to-day in a very impoverished state, from long years of mismanagement and ignorance; and if the Nandi are ever to have good cattle, they must recondition their grass-lands. At present, however, these evils do not worry them, for provided they can rear 25% or so of their calves, quality is of little account if they can but have cattle of some sort.

§ 3. VETERINARY KNOWLEDGE.

The specific diseases of cattle, rinderpest,¹⁹ east coast fever,²⁰ and pleuro-pneumonia,²¹ are known to the Nandi by name, as well as other diseases, for example, blackquarter, foot-and-mouth, anthrax, and three-days' sickness; and in some cases the name is taken from the part affected, as pleuro-pneumonia, from the Nandi word for "lung"; black-quarter, from the Nandi for "foreleg"; foot-and-mouth from the Nandi

¹⁹ Kipkaitet.

²⁰ Cheptigonit.

²¹ Chepuonit.

for "mouth"; and anthrax, from a Nilotic word meaning "swelling." Sometimes they can diagnose them, though any disease which shows, for example, one of the symptoms of rinderpest, may be diagnosed as such, though actually it may be no more than a catarrh; and a cough will be set down to east coast or pleuro without further enquiry or examination. and although the existence of anthrax²² is known, the symptoms convey little information, and an animal that has died of anthrax will be eaten without hesitation; deaths have occurred in the Reserve from this foolish behaviour.

Now while sickness in people is generally attributed in some way or other to the action of the spirits of the dead, the incidence of disease in cattle (unless magical influence is known to have been at work) is ascribed to natural causes. Yet these causes are such as one might expect to find in Pliny's "Natural History," but not from a people who have behind them centuries of cattle-raising. I saw not long ago a calf with a large abscess below the ear, which was probably due to an insect bite. The Nandi owner, however, thought otherwise: it was due, he said, to the fact that the calf was not allowed to suck its mother; yet it was more than a year old and had been weaned some four months. I have already mentioned the belief that drinking water gives calves east coast fever; and if I add that I have heard a Nandi express his belief that the brand AM²³ is in itself a protection against rinderpest (without the previous double inoculation), it will be realized that their pathological knowledge is almost non-existent, as one would naturally expect on the analogy of their knowledge of human ailments. On the other hand, the Nandi have quite a respectable knowledge of the anatomy of cattle, and can name most of the internal organs, though they know little about their functions. Anatomy, however, is largely a matter of observation, and between it and physiology there is a great gulf.

As a consequence of all this, when disease breaks out in a district, no attempt is made to treat it (unless a veterinary officer takes charge). A bonfire is made, in which wild olive, solanum²⁴, and other shrubs are burned, and the cattle are driven up to it. Omens are then taken from the entrails of a pregnant sheep, which is strangled by two men of clans that may intermarry: if favourable, the herd is driven round the fire, the sheep roasted and eaten, and rings are made of its skin, and worn by the owners of the cattle. If the omens are not favourable, the cattle are kept waiting until a suitable sheep is found. A similar ceremony is held when cattle are poisoned. Dead animals are eaten, no matter what the cause of death may be.

²² purasta.

²³ The veterinary brand denoting "immune to rinderpest."

²⁴ The *Solanum campylacanthum* (Ndi. lapotuet) possesses certain magical virtues, and is used in other performances of a magical nature.

The only practical remedy known to the Nandi is bleeding: a practice approved by the modern veterinary authorities in some diseases, e.g. rinderpest.²⁵ It is done with a special blocked arrow,²⁶ which is shot from a bow into the jugular vein: a thong is tied tightly round the neck, and when it is released, the removal of pressure stops the flow of blood. The operator stands about 4 feet from the animal, and the blood is caught in a gourd. Healthy animals are also bled periodically in the same way to provide the owners with their favourite food. Sick calves are sometimes given a gruel of eleusine meal which is fed from a gourd.

§ 4. NOMENCLATURE AND TYPES OF CATTLE.

Every animal has its name, which is usually taken from colour, the shape of the horns, or physical peculiarities, such as "Large navel," "Broad," "Cut-ears." The Nandi do not recognize any particular breeds of cattle, though they know that those of their kinsmen the Elgeyo are on the whole smaller than their own. The modern East African cattle are descended from the long-horned, straight-backed Egyptian ox (*Bos aegyptiacus*), and the short-horned, humped Indian ox (*Bos indicus brachyceros*). *Bos aegyptiacus* may have received its long horns from an extinct species, the remains of which are found in Mauretania, called *Bos opisthonomus*, having very long horns slanting forward, which Herodotus (IV. 183) tells us occurred in the cattle of the Lotophagi, and that they received the name because they had to graze walking backwards, lest their horns stuck into the ground. In some parts of East Africa, notably Ankole, cattle have an enormous development of the horns; in Kenya, however, the descendants of these ancient cattle have largely lost the cornual exaggeration; and we have some four breeds, not greatly differing from each other, in which the differences are due to geographical and climatic conditions; these breeds may be referred to as the Mâsae, Nandi, Elgeyo, and Kitosh. The Uasin Gishu Mâsae, however, derived their name, which means "striped cattle," from a peculiar development of the Mâsae breed which was apparently of a striped tortoiseshell colour, and of which a few specimens are still to be seen in Nandi. The only sort of typology used by the Nandi is that of appearance, and a set of adjectives exists to describe the different types of cattle, on the same lines as the names already mentioned, i.e., colour, horns, and physical peculiarities; indeed, these adjectives are for the most part used also for individual names.

²⁵ "Aids to Stockowners," ed. 3, p. 5. (Nairobi, 1930).

²⁶ lofignet.

Certain cattle are again differentiated as being "unlucky,"²⁷ because they have some physical abnormality which detracts from their value. Such cattle are of at least five kinds:

1. Those whose tails are frequently caught in clefts of trees, or between two close-growing stems.
2. "Those which do not swallow all the grass they eat, but keep some of it in the cheek."²⁸
3. Those which have a habit of getting their nostrils torn by twigs or branches.
4. Those which put out their tongues an abnormally long way.
5. Those which grind their teeth (excluding calves).

Besides the obvious drawbacks to some of these peculiarities, there is in these animals the fear of the abnormal, for a thing which is out of the ordinary may be harmful, and must be avoided. Hence, in a cattle deal, careful enquiries are made, lest a man find himself saddled with an unlucky beast.

Some special uses to which cattle are put have resulted in a distinctive terminology: thus, while there is a general term for "cattle," and words denoting animals at various ages, we find that cattle used for certain purposes are given other names. Thus, the cows which are given to a bride by her father and by her groom's father during the marriage ceremony are known as "The Fat Ones";²⁹ and the cattle paid by a man as bride-price for his wife are called "Daughter-cattle."³⁰ Animals which are paid by way of a fine or compensation for a murder are of two kinds: one is called "Break-spear,"³¹ and is paid by the murderer himself to the relations of his victim; the other, known as "Head-cattle,"³² are those paid on the murderer's behalf by his relations. And animals captured on a raid are called by a name which comes from a Nilotic verb meaning "to take a cow by stealth."³³

The complete division of cattle, as recognized by the Nandi, may therefore be summarized as follows:

Ordinary or herded cattle: 1, Inherited; 2, Acquired.
Unlucky cattle.
Marriage-cattle.
Bride-cattle.
Fine-cattle.

²⁷ Sigoranet, pl. Sigoranok.

²⁸ Têta ne malukui susuek tukul che ome, ako tepchi alak em matanda, a' mapendi moiêt.

²⁹ Chemwai.

³⁰ Tuk' ap chepto.

³¹ Iri-ñgot.

³² Tuk'am met.

³³ Koiy-o (-et), from Luo Koyo, "to take a cow for the dowry secretly from one of the relations." (Catholic Mission: Vocabulary Nilotic-English.)

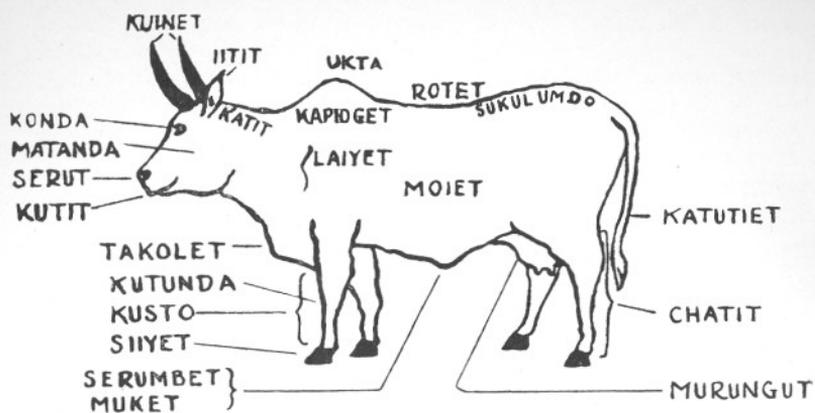


FIG. 1. SKETCH OF A COW GIVING THE NANDI NAMES FOR ITS DIFFERENT PARTS

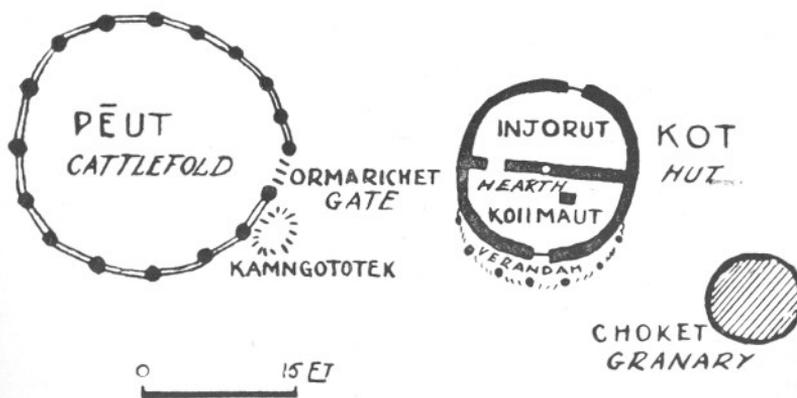


FIG 2. PLAN OF A TYPICAL NANDI HOMESTEAD

In a short paper, it is impossible to deal with the whole subject of cattle, and I have for that reason confined myself to the more practical aspect of the matter. Such things as cattle-magic, the effect of spells on cattle, religious ceremonies connected with them, and cattle in mythology, as well as other practical details, I have had to leave out. And, if it be thought that I have been too severe on Nandi methods, I can only plead that I have tried to describe what they actually do, rather than portray them as the "perfect savage" that exists in the imagination of some writers.

APPENDICES.

I. NANDI NAMES OF CATTLE DISEASES.

Chepkiyait: vertigo; rotation of the head.*
 Cheptigonit: (1) bile; (2) east coast fever.
 Chepuonit: pleuro-pneumonia. [from puon, 'lung.']
 Eset: any fever.
 Kipkaita, Kipkaitet: rinderpest.
 Kipkuit: anaplasmosis (gall-sickness).
 Kipkusto: blackquarter. [From kusto, "the fore-leg."]
 Maikutiet: foot-and-mouth disease. [From kut, "mouth."]
 Makarkarek: worms.
 Mokoiek: streptothricosis.
 Purasta: anthrax. [From Luo bur, "swelling."]
 Sasoit: redwater.
 Sutonik: contagious abortion.
 Tertit: three-days' sickness.
 Tuñgwek: catarrh.
 Ututik: mange.

II. NANDI CATTLE-NAMES AND TYPES.

1. Colour.

Chaipis: black and white.
 Kamarokoñg: black with white stripe on face.
 -kepe: black with white flanks; (masc. kip-kepe, fem. chep-kepe).
 Koroit: black and white.
 Lelgut: white mouth.
 lel, lelyo: white (masc. kip-lel, fem. chep-lel).
 Lelmet: white head.
 Miso: black (also masc. ki-miso, fem. che-miso).
 -mukye: partly brown (masc. ki-mukye, fem. che-mukye).
 -murkut: brown mouth (masc. ki-murkut, fem. che-murkut).
 -naria: white round eyes (masc. kim-naria, fem. chem-naria).

*As, for example, in poisoning from water parsnip (*Sium thunbergi*), where one of the symptoms is shaking or rotation of the head. (Aids to Stockowners, p. 132.)

-orus: light grey (masc. kip-orus, fem. chep-orus).
 Pirimet: red head.
 Samo: tortoiseshell; dapple.
 Samokut: dapple mouth.
 -sirue: white (masc. kip-sirue, fem. chep-sirue).
 -sitye: chestnut (masc. kip-sitye, fem. chep-sitye).
 Talelio: khaki-coloured.
 Tuimet: black head.
 Tuimisiŋg: black all over.

2. Horns.

-karai: hornless (masc. kip-karai, fem. chep-karai).
 -kulunymet: horns turned in (masc. kip-kulunymet, fem. chep-kulunymet).
 -ŋgatimet: erect horns (masc. kim-ŋgatimet, fem. chem-ŋgatimet).
 -puruk: horns pointing forwards (masc. ki-puruk, fem. che-puruk).
 seta: crumpled horns (masc. kip-seta, fem. chep-seta).

3. Other names.

Cheparit: cow with cut ears. [Par=cut; iit=ear.]
 Cheplakwet: nurse.
 Cheponeko: of the goats.
 Kimasas: ox with cut ears.
 -korat: blind (masc. kip-korat, fem. chep-korat).
 -makoŋg: one eyed (masc. ki-makoŋg, fem. che-makong).
 -malel: born when new grass was growing (masc. ki-malel, fem. che-malel).
 Melgut: lick-lips.
 Merewa: plantain-eater bird.
 -muke: large navel (masc. ki-muke, fem. che-muke).
 -muguŋg: lame; deformed (masc. ki-muguŋg, fem. che-muguŋg).
 Tepes: broad.³⁴

III. GLOSSARY OF WORDS USED IN CONNECTION WITH CATTLE.

Akete, v.: graze. (Pres.³⁵ oketi.)
 Anuet: thong of ox-hide.
 Aosit: the skin of a dead calf stuffed.
 Araket: a cow whose calf has died.
 Char, v.: bleed cattle from the jugular vein.
 Châtit: hind leg.
 Chêko: milk,

³⁴ Some of these words are used as people's names: see Hollis, "The Nandi," p. 67, and the list of names in my notes in J.R.A.I. lvii. 435-6.

³⁵ The 3rd pers. (sing. and plur.) of the tenses named are given.



FIG. 3.
A O S I T

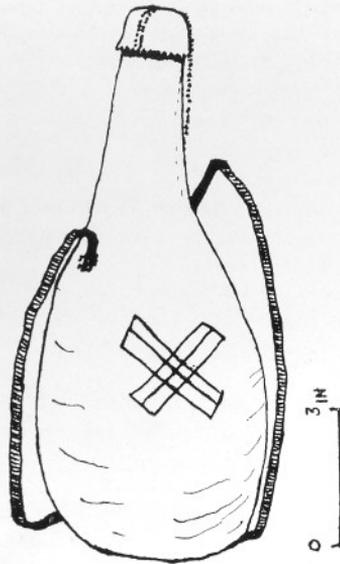


FIG. 4.
S O T E T N E P A R A - K U I



(Length:) 0 3 1/2 IN

FIG. 5. L O Ñ G N E T A R R O W .

- Chemwai: cow given to a bride.
- *Chepkulet: bladder.
- Eito: castrated ox.
- Iake, v.: herd cattle; take to pasture.
- Injorut: part of the hut where calves sleep.
- *Iri, v.: serve, of bulls. (Narrat. tense, ko-ri.)
- Iri-ñgot: cow paid as fine for murder.
- Iririot: a piece of ox-hide.
- Irot: drive cattle home.
- Iyuoget: a cow that has had a calf.
- *Kaiyuai, v.: have diarrhoea. (Pres. Koiyuoi).
- Kâmñgototek: dung-heap.
- Kâpioget: fore-part of the back-bone.
- Kâptich: cattle-place.
- *Kâtít: neck.
- *Kâtútíet: tail.
- Ke, v.: milk.
- *Kerepesiet: tick.
- Ketu, v.: bring cattle (towards the speaker).
- Kiminyoriet: the second or "honeycomb" stomach.
- *Kínet: teat.
- Kipkonyanit: the 3rd stomach, or omasum.
- Kipsageriet: the 4th stomach, or abomasum.
- Kirkit: bull.
- *Koito: liver.
- Koiyet: raided ox.
- *Kuinet: horn.
- Kusto: fore-leg.
- Kweri, v.: drive cattle.
- Laiyet: shoulder-blade.
- *Lat, v.: castrate.
- Límet: grazing-ground.
- Lofínet: blocked arrow for bleeding cattle.
- Luk, v.: go dry, of cows.
- *Mian, v.: be ill. (Pres. mioni).
- *Miondo: disease.
- Mistóat: herdsman.
- *Moiét: the 1st stomach or paunch; also "stomach" generally.
- Moita: calf. (Plur. moiek).
- Muito: ox-hide.
- *Mukuleldo: heart.
- Murungut: udder.
- Mwait' ap tan' gína: butter fat (for oiling the body).
- Naiget: blood from the neck of an ox.
- Ngenda: salt earth, salt-lick.

- Nges**, v. : clean out a cattle-fold.
Ngototek: cow-dung.
***Nye**, v. : chew. (Pres. nyei).
Ormarichet: door of a cattle-fold.
Os, v. : abort. (Pres. ôse).
Osit: an old cow past calf-bearing.
***Parpet**, pl. **Parpasek**: placenta.
Péut: cattle-fold.
***Puondet**; lung.
***Rany**, v. : turn, head off (cattle); stop from going somewhere.
Rorta, **Roriat**: heifer.
Rotet: the backbone of an ox.
Sigan, v. : pass dung.
Sigoranet: an unlucky beast.
Siiyet: hoof.
Soi: place where cattle are sent to graze.
***Soromyet**: kidney.
***Sosiot**: stick of the Phoenix *reclinata* or *mkindu* palm used for cleaning milk-gourds.
***Sotet**: gourd. **S. ne marich-kut**, wide-mouthed gourd; **S. ne para-kut**, narrow-mouthed gourd.
Subendo: young female calf.
Sukulumdo: rump.
Takolet: dewlap.
Tany: an ox, a cow.
***Taparta**: ford; drinking-place in a river.
Téta: the ox, the cow.
Tich: oxen, cows.
Tir, v. : to back an ox.
Tuka: the oxen, the cows. **Tuk' ap chepto**, bride-price; **Tuk' am met**, fine paid for murder.
Ukta: hump.³⁶

IV. WORDS CONNECTED WITH GRASS.

- Iwasto**: place where grass has been burnt.
Kipkirkiriet: knife for cutting grass; sickle.
Laluet: place where grass has been burnt.
Maleliet: place where new grass has grown after burning.
Ngei, v. : to cut grass.
Ngemiat: burnt grass.
Sâtyet: dried grass, straw.
Susuot, pl. **susuek**: grass in general.
Wâreñg: a place or area where grass is burnt without restriction.

³⁶ Words in this list marked with an asterisk * are used also of other things. The rest are properly used of cattle only.