

TANGANYIKA NOTES AND RECORDS

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JUNE
1947
No. 23

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JOHNSON REPRINT CORPORATION JOHNSON REPRINT COMPANY LTD.
111 Fifth Avenue, New York, N. Y. 10003 Berkeley Square House, London, W.1

First reprinting, 1968, Johnson Reprint Corporation
Printed in the United States of America

PUBLISHED HALF YEARLY

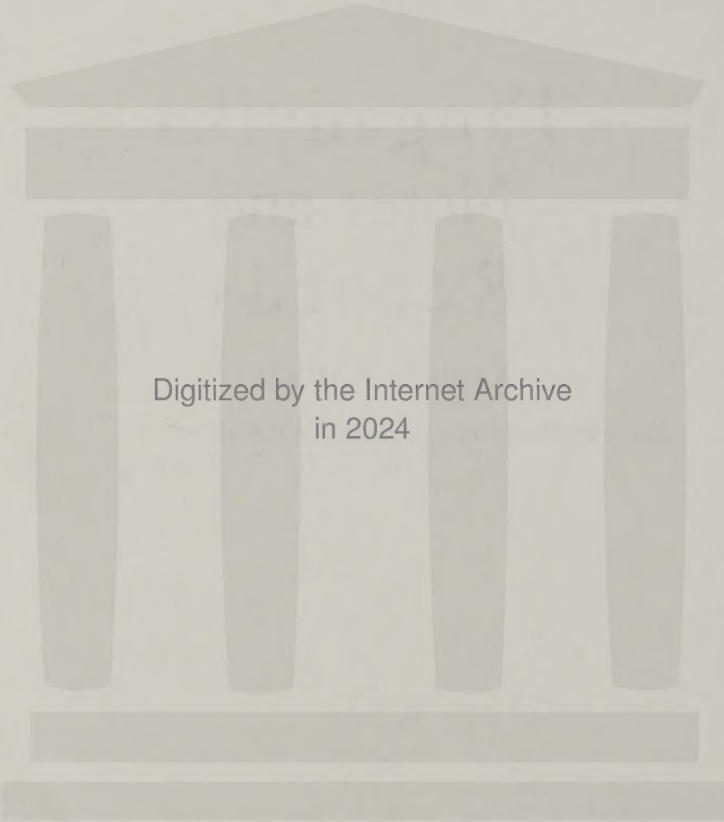
Tanganyika Notes and Records

Editor: J. P. MOFFETT

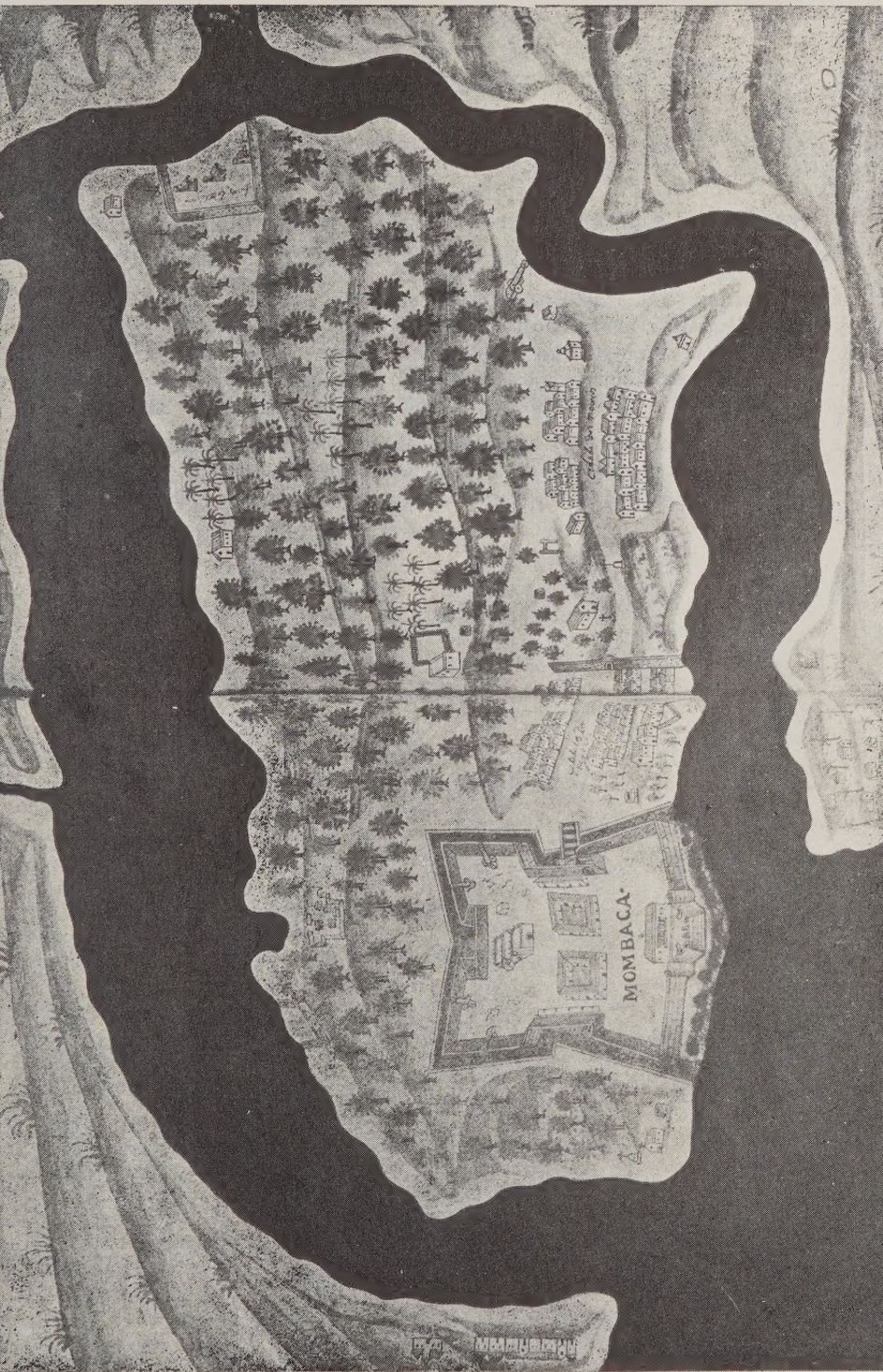
Editorial Committee: MARK WILSON,
A. M. B. HUTT, O.B.E.,

JUNE 1947

Number 23



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REZENDE'S MAP OF MOMBASA IN 1634.

Editorial Note

Subscribers will be glad to see that we have made up a little lee-way with the publication of this number. We hope to get out the next issue—which should have appeared in December 1947—within the next three months, and if there is sufficient material available the number for June 1948 will appear shortly afterwards. Subscribers will appreciate, however, that we cannot go to press unless suitable material is forthcoming. We therefore appeal to those who are contemplating the writing of an article “when they can get time” to make time and do it now.

It is thought that many of the addresses to which this journal is sent are out-of-date and that long delays in delivery sometimes occur in consequence: subscribers who have changed their addresses are therefore asked to notify us accordingly.

Rezende's Description of East Africa in 1634

By Sir John Gray

INTRODUCTION

In the first volume of his *Documents sur l'Histoire la Géographie et le Commerce de l'Afrique Orientale*, Guillain has summarised at considerable length the account given by Pedro Baretto de Rezende of East Africa as it was in the first half of the seventeenth century. Most writers on the past history of East Africa, including Justus Strandes, have depended on this summary for their information regarding the contents of Rezende's work.

Here is given a full translation of that part of Rezende's book which relates to that portion of East Africa which lies to the north of Cape Delgado. Guillain relied for his work upon a copy of the manuscript in the Bibliothèque Nationale at Paris. The translation given here has been made from a copy which is amongst the collections of Sir Hans Sloane in the British Museum. To judge from Guillain's book, there must be several textual differences between the two manuscripts, but none of them would appear to be of great importance and I have, therefore, not thought it necessary to note any *variae lectiones* in my rendering of Rezende's work.

I have deemed it advisable to add a number of explanatory notes to the translation. It is hoped that they will not be deemed to be too copious. Three appendices have also been added. The first gives a translation of the autobiographical inscription of Francisco Siexas de Cabreira, which has been placed over the entrance gateway to Fort Jesus at Mombasa and which appears to be a necessary historical supplement to Rezende's work. The second appendix gives an account of the Portuguese establishment in Mombasa in 1606 and provides material for an interesting comparison with that establishment as given by Rezende himself. The third appendix contains sailing directions which were drawn up in the year in which Fort Jesus was built as a guide to ships entering Kilindini harbour.

The title given to Rezende's work in the British Museum Manuscript is *Livro do Estado da India Oriental* and the portion thereof which has been translated into English is headed *Descripçam da fortaleza da Mombassa*.

The *Livro do Estado* is divided into three parts. The first of these contains an account of every voyage from Portugal to India from the

discovery of the Cape route by Vasco de Gama in 1497 down to 1634. It also gives an account of the outstanding events which occurred during the Government of each successive Portuguese Viceroy of India. There is in particular an account of the attempt to recover Mombasa in 1632 after the rebellion of Yusuf bin Hassan *alias* Jeronimo Chingulia. The compiler of the *Estado* was secretary to the Count de Linhares, the Viceroy of India, who was responsible for the setting out of that expedition. The operations, therefore, had a special interest for him. But both this and earlier events have been described in greater detail by other Portuguese chroniclers. Therefore, no attempt has been made to reproduce them here. Perhaps the most interesting feature of this portion of the *Livro do Estado* is the full length portraits of the Portuguese Viceroys of India. They include Vasco da Gama and "the great Albuquerque." They are clearly not merely conventional portraits but life-like representations of the persons portrayed.

The title of the second part of the *Livro do Estado* may be Englished as follows:—

"The plans of the fortresses from the Cape of Good Hope to the fortress of Chaul with a full description of all that is concerned with each of the said fortresses and a summary of the account of revenue and expenditure."

The third part of the *Livro do Estado* deals similarly with all fortresses between Goa and China.

"The description of the fortress of Mombasa" is to be found in the second part of the work. It consists of twelve closely written pages giving an account not only of the Fort Jesus at Mombasa but also of the coast of East Africa and islands adjacent thereto between Capes Guardafui and Delgado. These are followed by two and a quarter pages, which are devoted to a tabular statement of the revenue and expenditure of the fortress. The letterpress is accompanied by a coloured plan which gives a minute bird's eye view of the island of Mombasa, and also by a map of the coast between the two capes just mentioned. There is a similar plan of the island in the Paris copy of the *Livro do Estado*, which has been reproduced by Justus Strandes in *Die Portugiesenzeit von Deutsch-und-Englisch-Ostafrika*—still the most authoritative work regarding the Portuguese occupation of Mombasa and the parts of East Africa adjacent thereto. But, to judge from the reproduction in Strandes' work, the plan in the British Museum contains greater detail than the Paris plan. It is clear that the British Museum plan was intended to illustrate amongst other things certain incidents in the unsuccessful attempt on the part of the Portuguese to recapture Mombasa in 1632. Thus, the "Turks' Bastion" on the mainland opposite to Fort Jesus is depicted as having two cannon mounted upon it. As is shown in Faria y Sousa's accounts of these events in *Asia Portugeza*, two ten-pounders were temporarily mounted on that bastion by the Portuguese during those operations. Again, the British Museum plan shows a cannon mounted on a carronade, but having no

kind of gun emplacement, in some woods at the north-east corner of the island facing what is now Frere Town. Again, we learn from Faria y Sousa that a detachment of Portuguese troops was sent to the mainland opposite "on the side of the Moors' city to divert the enemy that they might not hinder our landing. This day (sc. January 22, 1632) eight of our seamen deserting to the enemy discovered our designs, which caused them to move their cannon to a place where they could annoy us."

Cartographically, Rezende's pictorial plan is open to innumerable criticisms. Fort Jesus is made to occupy a far greater space than it really occupies and certain other features have been similarly exaggerated. Nevertheless, the plan goes into minute details, which are not fanciful but represent buildings which actually existed. Much of what it portrays has long since disappeared and for that reason the plan is invaluable.

It should also be pointed out that, in so far as East Africa was concerned, Rezende was not writing with first-hand knowledge and that consequently, he is not always accurate in his details. Thus, he is wrong in the date which he assigns for the building of Fort Jesus at Mombasa. He is also wrong regarding the positions of Pemba, Zanzibar, and Mafia in their relation to the main continent. But other evidence goes to show that his description of Fort Jesus is remarkably accurate. His work was intended as an official hand-book and to the best of his ability he prepared it upon the most reliable information available.

Pedro Barretto de Rezende, the author of the *Livro do Estado*, was a native of Pavia and a knight of the Order of Saint Benedict. The *Livro* was prepared on the instructions of his master, Miguel de Noronha, Count de Linhares and Viceroy of India. After having been written, it was handed over to Antonio Bocarro, who was keeper of the Portuguese archives of India in Lisbon from 1631 until his death in 1649 and who was also the author of *Extractos dos Decados*, which was first published in 1876. After Bocarro had revised Rezende's work, the book was presented to Philip III of Portugal and IV of Spain. According to the flyleaf of the Sloane manuscript the work was finally completed in 1646, but internal evidence shows that Rezende's survey of the Portuguese possessions in East Africa was not carried beyond 1634. He records the fact that the people of Pemba "are still rebellious." In 1635, Francisco Siexas de Cabreira became Governor of Mombasa and by 1639 he had "chastised Pemba," killing the principal chiefs and compelling the inhabitants to pay tribute to the Portuguese crown (cf. Appendix I).

There was one very good reason which prevented Rezende from carrying his account of East Africa and the East Indies beyond 1634. As already mentioned, he was a native of Pavia and, therefore, a subject of the King of Spain. In 1640, Philip IV of Spain had ceased to be Philip III, King-Regnant of Portugal. Some six years previously a national rising had broken out in many parts of Portugal and in 1640, Portugal's "Sixty Years' Captivity" had come to an end and John, Duke of Braganza, reigned in the Spaniard's stead.

The *Livro do Estado* should be compared with an earlier account of East Africa, which appears in *The Book of Duarte Barbosa* and has been translated into English for the Hakluyt Society by M. L. Danes.* Barbosa wrote his book in 1516, only eighteen years after Vasco da Gama had first rounded the Cape of Good Hope and sailed into the Indian Ocean. At the date when he wrote, Mozambique had been only six years in the hands of the Portuguese and the struggle to conquer Mombasa had barely begun.

Much had happened between the dates when Barbosa and Rezende wrote their respective works. Mombasa had been finally subjugated in 1592, and Fort Jesus had been erected two years later. Outwardly it had then appeared as if after close on a century of fighting the Portuguese had at last brought the whole of the East African littoral under their effective control. But this was not to prove the case. Outlying places continued to be "rebellious" and, following upon the occupation of Mombasa, there had been constant friction between the Portuguese commanders of that place and the "kings" of Malindi, who up till then had been Portugal's most consistent and staunchest allies. The friction had finally led in 1631 to the rebellion of Jeronimo Chingulia (Yusuf bin Hassan), the "tyrant king" of whom Rezende has much to say. In that year the Portuguese at Mombasa had been massacred and Fort Jesus had been lost. In 1632, an abortive expedition had failed to recover the place, but in the following year Yusuf bin Hassan had evacuated the island and the Portuguese had been able to re-enter without fighting.

East Africa as depicted by Rezende in 1634 had not yet recovered from this rebellion. In Mombasa itself "the town of the Moors" was practically deserted, having been abandoned by the majority of the inhabitants when Yusuf bin Hassan abandoned the fortress and island. The "king" of Pate, who "used to live in complete accord with the Portuguese," was now suspect and needed watching. The "Governors" of Siu were "not entirely faithful or to be trusted." The inhabitants of Pemba "are still rebellious." Kilwa, which Francisco d'Almeida had once severely chastised and where once there had been a Portuguese fort and garrison, is now independent and does not even pay tribute. The inhabitants of Mafia and the adjacent islands "are subjects of the king of Quiloa and cannot be interfered with by the Captain of Mombassa or his Factor." Even at Faza and in Zanzibar, the inhabitants of which had for many years been well disposed towards the Portuguese, the position had been considerably weakened by the withdrawal of all the Portuguese settlers to Mombasa. Apart from the "Moors" there were also the "Caffres" in particular the "Caffres called Mozungullos," who

* Other short descriptions of Mombasa and the East African coast have been given by Ibn Batuta in 1331 (printed in Guillain I. 292), an anonymous Portuguese writer in 1505 (printed in Axelson—*South East Africa* p. 235), Father Gaspar Monclaro in 1562, (now in Bibliothèque Nationale at Paris, Portuguese Ms. 8 f. 241), Frey Gaspar de Santo Bernardino in 1606 (printed in his *Itinerario da India*), and Father Jeronimo Lobo in 1624 in his *Historia Geral da Ethiopia* (translated into English by Dr. Johnson in 1735.)

with their poisoned arrows were a constant source of terror by night to the Portuguese at Mombasa. Even the erstwhile friendly "Mossegejos Caffres" are described by Rezende as people "who continually infest" the adherents of the Portuguese at Malindi.

Five years after the date at which Rezende closes his story, Francisco Siexas de Cabreira with monumental self-complacency caused to be inscribed above the entrance to Fort Jesus at Mombasa an account of his exploits whilst Governor of Mombasa. That inscription can be read to this day. The rebels in East Africa were punished by him with a "chastisement not expected in the Indies," which chastisement he describes in some detail (Appendix I). But later events showed that he had done little more than make a solitude and call it peace. In 1652, he was once more called back to Africa to put down a fresh rebellion. Once again, he was ruthless, but once again also he could do no more than stem momentarily the rising tide of revolt. In 1698, after a siege lasting close on three years, Fort Jesus was captured by the Arabs of Oman.

There were many reasons for the downfall of Portuguese supremacy in East Africa—reasons political, social, economic, geographical, and administrative. Portuguese historians have not attempted to conceal the fact that the dishonesty and incompetence of many of their colonial officials contributed in no small way towards this *débacle*. But even in its days of decline Portugal had its truly great men. Rezende's account of Mombasa makes mention of Manoel de Menezes, the commander who fought his single ship against six English ships and finally, when utterly crippled, let his vessel run ashore and become a total wreck on the rocks of Johanna in the Comoro Islands rather than surrender to the enemy. But neither Rezende nor the Portuguese historian, Faria y Sousa, tell us what his English opponents tell us, namely, that in a lull in the fighting the English boarded the crippled Portuguese ship under a flag of truce and invited Menezes to surrender with all the honours of war and that to this proposal Menezes replied "that no infelicity should make him alter his first resolution; how that he would stand off to sea, if possibly he could, and encounter with us again and then, if fire or sword forced him, he might unhappily be taken, but he would never yield, and if we took him alive, he hoped he should find the respect of a gentleman; and till then we had our answer."

Again on the night of December 12th, 1698, a non-commissioned officer, Sotto-Maior Leonardo Barbosa, was after close on three years of siege the commander of the few surviving members of the garrison of Fort Jesus at Mombasa. His companions were only thirteen in number, eight Portuguese, three Indians, two women and one African boy. All of them were sick. That night Barbosa sent the boy out to gather leaves as salves for the wounds and sores of himself and his companions. The boy fell into the hands of the Arabs, who on hearing of the parlous state of the defenders scaled the walls of the fort. Under Leonardo Barbosa's leadership the defenders fought desperately, retreating from one building to another. The assault is said to have begun at eight o'clock in the



AERIAL VIEW OF THE FORT TODAY.

[PHOTO BY COURTESY OF THE PRISON DEPT., MOMBASA.]

evening and to have lasted all night. At seven o'clock the following morning Leonardo Barbosa was seen to rush, armed with a blunderbuss, from the place where he was making his last stand. He at once fell mortally wounded. The survivors thereupon surrendered. Two of the Portuguese were placed in chains and told by their captors to show them where the Portuguese kept their treasure. One of the captives led his captors to the powder magazine and the other to the chapel, where a large quantity of gunpowder had also been stored. As the Arabs rushed tumultuously into these two places, the captives managed to ignite the gunpowder and so destroyed themselves and many of their captors.*

The faults and the failings of many of the Portuguese in East Africa may at times have been neither few nor small, but deeds such as those just described deserve to be rescued from oblivion.

DESCRIPTION OF THE FORTRESS OF MOMBASSA

The fortress of Mombassa is situated on the east coast of Africa in Cafraria on an island of the Cafres, who are called Mozungullos (1), in latitude four degrees south. It was constructed by the Viceroy, Mathias de Albuquerque, in the year one thousand five hundred and eighty-four (2). It is constructed on the top of a rock, which has been excavated for the purposes of the fortress and consists of a recessed double curtain wall one fathom in height. Inside on the top of this wall there is a parapet, which is a man's height above the wall, and affords shelter for defending the interior. The said parapet is in some places three palms thick and in other places four palms. The shape of the fortress is that of a quadrangle, which is longer than it is broad, and it has four bastions at its four angles, which are called by the names which can be seen written on them (sc. S. Mathew (3), S. Albert (4), S. Philip (5), and S. Mathias (6)) and where likewise can be seen the shape of these bastions. The two on the land side are triangular and in shape like a gable end. The two on the harbour side are in the shape of obtuse-angled triangles. As the plan shows, there is also in the fortress a breastwork, which defends it on the harbour side. Entrance from the fort is obtained by a concealed gate, which can be seen leading from the middle of the breastwork (7). This breastwork is fifteen geometric paces in breadth and runs along the wall of the fortress and the harbour and is twenty of the like paces in length. There are two bastions with loopholed sentry boxes in the two angles of the breastwork next the river.

There is also at this fort a trench on the land side, which has been cut out on the west side to a width of three fathoms. At its opening it

* The story of the fall of Fort Jesus is to be found in *O Chronista de Tissuary* III. 3-10. It was obtained from Braz Fialho, an Indian sailor, who was a member of the garrison at the time. After the fall of the fort he was taken by the Arabs to Rustak, whence by dint of bribery he managed to effect his escape to Goa in 1701. Strandes mistakenly calls the Portuguese Sotto Maior "Leandro Barbosa." *O Chronista* calls him Leonardo Barbosa. As Strandes points out, the date of the capture of the fort as given by Braz Fialho is the same as that given in an Arab ballad.

is about the same width, but slightly less. It is two to three fathoms in depth and is cut out of the same rock. It is more narrow along the gable ends of the bastions, because it does not conform entirely to the same level, but it conforms as regards its angles to the angles of the bastions. The depth of the said trench, together with the said wall and parapet, make the said fort conveniently and sufficiently protected against the black people of the country, who are not accustomed to climb up walls.

The four bastions, which are recessed like the fortress, are a man's height above the wall. The two on the harbour side are more than fifteen paces broad and are open. The parapets inside those on the land side make a gable end. All of them are uncovered. There is a breastwork at the top of the parapets, which is three palms thick at its loopholes. The walls made by the bastion of S. Philip and that of S. Mathias are longer on one side than the other, being twelve fathoms long according to Portuguese measure on one side and shorter on the other side, being ten fathoms long outside the bastions, which are of the size mentioned.

The houses of the Captain run along the wall on the innerside and along the breastwork and the harbour. They consist of terraced houses sufficient to provide a dwelling place for a married man and his family.

In the middle of the fortress there are terraced houses, which are placed in rows and covered with tiles and serve as dwelling places for the soldiers. Along the wall above the gate there is a quadrangular building with a flat roof in which there are two subterranean chambers used as shelter. The powder is kept inside beyond the walls. There is a magazine made of the same rock, where the stores and munitions are kept. It is a very damp place by reason of the fact that it is very low and, therefore, it is very rarely that the foregoing articles are kept there.

There is a cistern inside the said fort, which is constructed out of the same rock, but it is not well arranged, nor is it in use, but now it is ordered to be arranged. Except for this there is no water in the fort, but water can be obtained at a distance of four fathoms in a well. This well is brackish but can be used in time of necessity and the way to it can be fortified (8), as was done by the King of Mombasa, Dom Jeronimo, the tyrant (9).

The artillery, which is carried by the fort, consists of sixteen pieces. Five of them are of iron and of from six to ten pounds calibre. Most of them are of bronze and of thirty-six pounds calibre. Amongst them is a cannon of twenty pounds, which the Viceroy, the Count de Linhares (10), ordered to be fetched from the island of Angazija (11) from the ship of Dom Manoel de Menezes (12), which was lost with all its artillery. All these cannon are distributed amongst the bastions and the breastwork. In addition to this the Count de Linhares, the Viceroy, ordered to be sent to the fort the thirteen cannon, which are at Mozambique and were taken by the Roque Borges (13) from the King of Mombassa.

In addition to this the said fort has thirty-two muskets and one

hundred and thirteen arquebuses. The ammunition for the said arms consists of forty chests of small lead shot weighing twelve quintals (14) for the musketeers, 1713 iron shot, and more stone shot for the artillery, 238 powder barrels, 138 grenades, 36 fire darts, 730 cotton matches, and nine pikes. The supplies consist of one hundred and thirty-six bags of rice, each sack comprising twenty Portuguese alquiers (15), and two hundred and forty bags of meal, which are equal to sixty sacks and a half.

The garrison of the fort consists of one hundred soldiers, of whom seventy-five are inside the fort and in the two ships belonging to the navy, which patrol the coast. Twenty-five men are in the forts at Macupa. The seventy-five soldiers are subordinate to the Captain. The commanding officer of all the troops pays each one of them monthly for subsistence ten larims (16) and for lodging nine xerafins (17), which is equal to five crusados (18) and a half at the said fort.

The three forts at Macupa (19) are three buildings, which are erected in a quadrangle alongside the harbour on the island of Mombassa on the side by the mainland at a place, where one can cross dry foot, as can be seen on the plan. They are used to prevent the Mozungullos from crossing from the mainland to the island. The middle building is larger than the other two, but is no more than a house with an upper storey above and a ground-floor below. It is entered below in the middle of the ground-floor and has an area of five fathoms and is as long as it is wide. It is covered by a flat roof. There are fifteen soldiers and one Portuguese bombardier in it. The soldiers are paid seventy larims monthly for subsistence. The Captain (20) is paid one hundred and fifty xerafins yearly as a salary. He is also captain of the other two forts, which are built on each side laterally at the distance of a musket shot. These are also each of them a building with an upper-floor covered by a flat roof, but are smaller, being about half the size with an area of three fathoms. In each of them there are five soldiers, who defend it with their muskets from round loopholes. In the middle fort there are two metal sakers and a Portuguese bombardier.

Despite the impediment caused by the forts it is still possible to pass over from the mainland to the island. The already mentioned Mozungullos Caffres on some dark nights pass by the dry crossing to the north and pass between the forts, keeping close to them. They do not come in large numbers, but they inflict great loss. There is a wall close to the three forts, which was formerly made by the natives for the like purpose of obstructing the said passage against the Mozungullos (21). It is of a small area and made of sun-dried brick. This and the thickets very frequently enable them to pass by, if insufficient defence is maintained by the persons on watch in the three forts (22).

Most of the river or arm of the sea, which surrounds the island, is of the depth in fathoms, which is shown on the plan, where also can be seen the course of the ships, the tides, the channels and bays, which

are likewise in conformity with official cartography. On the side, where Tuaca (23) harbour is, which is the other harbour beyond the fort, which makes Mombassa an island, the channel, is one-fifth of a league wide at the entrance to that harbour. After the entrance it becomes wider, as can be seen on the plan. It then turns to the other side, where it becomes narrower. On the side where the fortress is, it is called the harbour of S. Antony (23a). Here it is a cannon shot in width at the entrance to the harbour, and, as can be seen on the plan, becomes narrower further inside.

The ship's course for the coast of Mombassa is the same as that for Sofalla and Mozambique with some difference because of the inlets on the coast. The currents are likewise the same and so are the winds and monsoons.

His Majesty has made a Customs House at Mombassa, where duties are paid by all the boats sailing from Cape Guardafuy to Cape Delgado at the rate of six per cent. The tyrant King, Dom Jeronimo, farmed these duties at about nine thousand xerafins yearly as well as the additional one per cent, which yielded 2,200 xerafins more or less. His Majesty ordered the third part of the revenue to be given to the traitor King in order to pay the Mozungullos, as was in fact done. This share is still paid to the headmen of Mombassa. At present this fortress and most parts of the coast yield less, namely, from six to seven thousand xerafins. This Customs House and that at Pate, which belongs to His Majesty and is for ships which cannot pay here, pay the whole revenue to His Majesty's Treasury. In the countries in the interior, such as that of the Mozungullos, fifty score of linen cloth are paid, which amounts to a thousand xerafins. These were formerly given (sc. to the inhabitants) by the tyrant King, Dom Jeronimo (24).

The whole of the island of Mombassa belongs to His Majesty together with its domains, palm groves, herb gardens, and enclosures (25). It is one and a half leagues long and half a league broad, narrowing down at its extremities. It is fertile and has good springs—both fresh and brackish. It is farmed at a rent because at the present time there are not more than six settlers in Mombassa outside of the domains. The rent amounts to sixty-nine and a half crusados. The whole of the kingdom of Mombassa, which formerly belonged to the said tyrant, belongs to His Majesty, including the mainland. Each of the Caffres villages is obliged to supply every year twenty bags of meal. When labour was a novelty to them, it was customary to give cloth at the rate of one candil (26) for every four bags, which amounts to sixty candils for six score of linen cloth, and which was collected by the Factor of Mombassa.

His Majesty also claims all the amber (?ambergris) found on the coast of the Kingdom of Mombassa. This was claimed by the aforesaid tyrant, who did not ever come to know what was the amount thereof, because each person, who came across it, had to state the amount thereof and it was rarely met with.

The revenue of the opium and tobacco, which is transported to Tuaca and Matuapa (27) from the mainland, also belongs to His Majesty as does all the ivory, which comes from the other side and which pays a duty of one crusado for each frasila (28). As it is still the first year and there is a lack of merchants, it is what can be paid in respect of this. Nothing has accrued so far from the said commodities.

The King of Pate pays a tribute to His Majesty amounting to one hundred pardaos (29), which is one hundred and fifty xerafins. The King of Ampaza (30) pays the same. The King of Lamo (31) pays the same. The Governor of Sio (32) pays fifty. All of which amounts to 525 xerafins.

After payment of the expenses of the fortress this revenue leaves a deficit of seven or eight thousand xerafins, which is remitted from Goa. Owing to the trade and the population of Mombassa it appears that there will be a deficit and that none of the expenditure will be defrayed out of the said sources of revenue.

The town of the Moors, which is depicted on the plan, has at the present time no inhabitants except one old man, called Faquevalle, whom the Viceroy made Governor of the Kingdom of Mellinde and Mombassa in gratitude for his fidelity and loyalty. Nearly all the Moors—and there were many of them in the said town—were guilty of the treasonous rebellion raised by the said Dom Jeronimo and all fled.

The Viceroy also ordered twenty settlers, who were living amongst the Moors, to come from Pate and Zemzibar (33) and live in Mombassa in the belief that this was necessary for the revival of the fortress. As will be seen, it was very necessary for many reasons that they should not live amongst the Moors because of the great solitude and because it was to the hurt of their consciences and of the reputation in which the Portuguese name is held by the true Moors living in those countries, because they do not submit to our jurisdiction, although they live according to the form and principles of the laws of the realm.

The people, who live in the interior on the mainland in the vicinity of Mombassa, are Caffres called Mozungullos, who have neither law nor king nor any other interest in life except theft, robbery and murder. So far as can be seen, they do not exceed three or four thousand in number. They are remarkably timid and fight with poisoned arrows, which are sufficient to draw blood and to cause immediate death, because the Caffres have no antidote in the land (33a). The arrow-head inflicts a wound, which does not cause the blood to flow inside the body but makes the poison set to work quickly in the head and there is no remedy. This poison is made from the fruit of the oil palm tree, which the Caffres boil. They make such a boiling that no body can escape with life even from the smell of it. The poison issues like froth, and there is no escape for any person wounded thereby. For the other (sc. the smell) there is some slight remedy.

For this reason there always exists in Mombassa a continual fear of

the Mozungullos crossing to the island. They pass by the said crossing of Macupa in the north, as already mentioned, and also by the capes, and by swimming in the shallow water, and also in rafts. They are rarely seen and cause much mischief. These Mozungullos Caffres were regarded as the vassals of the King of Mombassa, Dom Jeronimo, but their submission was mainly obtained by giving them cloths. They were in reality quite different from vassals. Notwithstanding the aforesaid obstruction (sc. the forts at Makupa), they would come to murder in the land of the said Dom Jeronimo, who called himself their king. Nevertheless the true foundation for making the Mozungullos the vassals of His Majesty will be through the King of the Kingdom of Mombassa and Mellinde, because the kind of those two kingdoms is the vassal of His Majesty. Without this it is quite impossible to make them even quasi-vassals, whether or not they are given cloths whenever they demand them.

Many Arabian Moors live both to the north and to the south along the coast belonging to the fortress of Mombassa. They are like prisoners of the Mozungullos Caffres, because they have to pay them a large tribute in cloth in order to be allowed to live in security.

There is a custom of this fortress of Mombassa to allow the Captain thereof every year a pangayo(34) with ten soldiers. His Majesty also orders a galliot to be manned with twenty-five soldiers under a Captain to keep a lookout for the Turks (35). The Captain is given a salary of one hundred xerafins. The soldiers have the same subsistence allowance as in the fort and draw it from there for this purpose. The pangayo sails along the coast and the islands thereof up to Cape Guardafuy to keep a lookout, as above-mentioned, for the Turks, who usually come from the Straits of Mecca (36), so that the fortress may be warned and not be seized or be captured. The Captain and the soldiers also punish all who do not hold the arms of His Majesty in proper respect, and wait for the ships, which come to the coast from Dio (37). Damaon (38), Bassaim (39), and Chaul (40). They say that it is difficult for these people and that the Captain of the fortress compels them to relinquish the trade and liberty, which they desire. Some of the Captains of the Patrol offer their services to His Majesty and act in every respect from the best motives, but the greater number act so much to the contrary that the Viceroy, the Count de Linhares, has made an order that there shall be no such Captain.

Formerly the King of Pate showed great loyalty towards the Portuguese, but because of the rebellion of the said Dom Jeronimo he has been ordered to have continuously a Portuguese as his confidential adviser, in order that we may be informed as to how he conducts himself (41).

On the coast of Mombassa sixty leagues to the north there lies the island of Patte, Ampaza, and Sio, which is three and a half leagues in length and two in breadth. In it there are three kingdoms, which, as already mentioned, are subjects to His Majesty. The Kings and their subjects

are Arabian Moors with smooth hair. The King of Patte is more important than the others. He used to live in complete accord with the Portuguese. Formerly settlers lived in his lands with their families (42), until the Viceroy, the Count de Linhares, as already mentioned, ordered them all to pass over to Mombassa, whereby the King was disappointed. The King of Patte furthermore assented to our churches being built in his territory on condition that they were not built inside his walled town (43). A customs house (44) was placed here by the Viceroy, the Count de Linhares, for the ships, which are unable to proceed to Mombassa to pay their dues to His Majesty's treasury. The King of Patte is thereby placed in a particularly favourable position by reason of the trade, which comes to his territory. The Customs House is like that of Mombassa and has four Portuguese officials, whose expenses, amounting to six hundred and sixty-six xerafins, are paid from His Majesty's treasury. Ships arriving from the coast of India never call at the island of Patte on their outward voyage, unless they are prevented by the monsoon from proceeding to Mombassa. The King of Patte has three thousand armed Moors in the island as well as the assistance of some Caffres belonging to the mainland.

The Kingdom of Sio has no king, but it is ruled by Governors (45), who are not entirely faithful to, or to be trusted by, the Portuguese. Ships, which are proceeding from Patte to Ampaza, are forced to go to Sio, but they do not make a good crossing. (They (sc. the people of Sio) pay the amount already mentioned as tribute as vassals of His Majesty.

The King of Ampaza is also an Arabian Moor. All the people in his kingdom and the greater part of the island are, as already mentioned, subject to His Majesty and vassals paying the tribute already mentioned. There is a church in his land and a vicar belonging to the order of S. Augustine (46) as well as some married Portuguese settlers and their families, who have likewise been ordered to pass over to Mombassa. The King is loyal and submissive to the Portuguese. He has fifteen hundred armed Moors as well as some of the people on the mainland, but he is a less important person than the King of Pate (47).

This island with its three kingdoms abounds in palm groves, corn and most foodstuffs as well as oil palms, but has nothing else except what is brought on the mainland and some amber (?ambergris) which is found on the coast, and civet obtained from cats, which are bred.

Adjoining this island and separated from it by a channel is another island, which is called Lamo and has a Moorish King. The inhabitants are for the most part Arabs and regard themselves as more noble than those of Pate and Ampaza. The island is smaller than that of Pate and for that reason has no more than fifteen hundred armed Moors. It is subject to His Majesty and pays the tribute already mentioned. No Portuguese live there. The King has pledged his lands under an agreement for furnishing security. These lands comprise the same palm groves and domains as have been described in regard to the island of Pate.

The Kingdom of Mellinde (48), which is eighteen leagues to the north of Mombassa, is a town on the mainland. Formerly it was no more than a small settlement of Moors. It has now decreased to a third part of the size that it was. The Moors, therefore, are very loyal to the Portuguese—so much so, that once an English ship arrived and anchored over against Pemba; there happened to be some Moors of Mellinde in the said island; the English gave themselves out to be Portuguese; the chiefs of the country found them to be deceitful and did not believe the visitors, knowing them to be our enemies, they carried their knives within their robes and gave the English nothing, killing all whom they could kill (49). The Kingdom, which also belonged to the tyrant King, Dom Jeronimo, made war against His Majesty. The Viceroy, the Count de Linhares, therefore, appointed as Governor a trusty Moor called Barcairanda and ordered him to be given twenty-five scores of linen cloth and two candils (50) of iron to disburse to the Mossegejos (51) Caffres, who continually infest them. There is nothing else of interest in the Kingdom except the expenditure above-mentioned.

Twelve leagues (52) to the north (53) of Mombassa and eight from the mainland is the island of Pemba. This was given by His Majesty through the Viceroy of India to the tyrant King of Mombassa (54). He was held in high regard by the natives and imbued the Caffres with a certain amount of treachery with the result that they took part in the rebellion against the Portuguese and are still rebellious (55). This island is fourteen leagues in circumference. It has fourteen large towns besides many smaller ones. It is very fertile and luxuriant. There are some islets on the side near the mainland. Some are of an area of one league, others of half a league, and others of three-quarters, which ought to be given to the Portuguese, because in between the fissures of the rocks there are some uncultivated palm groves. The people of Pemba are Moors, who claim to be of gentle birth. There are also so many Caffres that it is necessary to place boundary marks for the natives who seek for land to cultivate. Together with the Moors they amount to four or five thousand men at arms.

The rice of Pemba is better than the giragal rice of India. There is also corn, sesame, plenty of beans, many cows, butter, and wild pigs (56). These last were formerly bred by the Portuguese when they lived here. They caused the natives such mischief that they were ordered to be taken from here to the fortress of Mombassa and in place thereof the island was made to pay a tribute of six hundred bags of rice. There are also palm groves and plenty of timber, which can be used for building ships. At least a third part thereof is cut into fathoms and is obtained by means of the rivers and the creeks, whereby the rivers enter the sea. These are no ports capable of holding large ships. Such ships prefer to proceed to Mombassa. They escape thereby ruinous contact with the Mozungullos. Also sickness thereby ceases to have effect. For many other good reasons it is a fixed practice to use this port for the assembling of the fleets and the many ships of the realm, which principally

come to the coast of Mombassa. Most of them bring supplies for this fort and for that of Mozambique. For this purpose they carry pilots.

Forty leagues to the south of Mombassa is the island of Zanzibar, which is fifty leagues from the mainland and the same number of leagues in circumference. It is for the most part inhabited by Arabian Moors, who most of them have a Moorish King, who is a great friend of the Portuguese. Along all this coast there live about nine thousand married settlers with their families. There are palm groves and domains, which belong to the King. There is also a Church (57) with a vicar of the order of S. Augustine to whom the King does all possible favours. The island is fresh and fertile. For the most part it is covered with bush and timber of every kind used for ships. The King thereof does everything which is for the common good. He is not a vassal of His Majesty and pays no tribute, but he favours and helps the Portuguese rather than be their vassal. The Captain of Mombassa has a factor here, who buys and sells in conformity with the instructions given to him. The control of Pate, Ampaza and Sio is not within his jurisdiction.

Near the coast sixty leagues down to the south from Mombassa is the island of Monfia (58), which is more or less in the shape of a triangle, being twenty-five leagues in length, circumference and breadth. It is larger than any of the islands on the coast coming from St. Laurence (59). To the north it turns into a point, which is rent by the sea. It is as wide as it is long to the south. There are plenty of pitch-bearing trees in it and also good timber. As in the case of most other places, the inhabitants, who are Moors, are paid by the Captain of Mombassa sixteen purple cloths, which were formerly worth twelve tangas (60) but are now worth nine or ten, for one barrel of pitch, which is worth twenty xerafins. The Captain of Mombassa is obliged to pay for these barrels of pitch yearly, which the Factor of the fortress of Mombassa is ordered to collect. The said Captain pays for more pitch than the country produces and than is supplied to him. A great deal of pitch is lost because the natives devote themselves more to cultivation than to obtaining pitch.

There is in this island plenty of good and large timber. Ships are made from a single pitch-bearing tree, which can hold fifty persons and which can last a long time, because the pitch preserves them. Montondolos (61) are also made out of another tree, which is oily and, therefore, lasts a long time.

There is in this island plenty of butter and cows, which are fleshy and good. The inhabitants are subjects of the King of Quiloa (62) and cannot be interfered with by the Captain of Mombassa or his Factor. There is a small fort (62a) on the east side or the banks of a stream, where in time of war there are ten or twelve Portuguese soldiers, who come from Mombassa to support and protect it on behalf of His Majesty. The said fort is no more than a limestone building with an upper storey and contains no weapons except a blunderbuss, which is sufficient for the soldiers to direct against the people of the mainland.

There are three more islands adjoining the islands of Monfia. One is called Anxoly (63) and is half a league in circumference, another is called Coa (64) and is three leagues in circumference, the other is called Zibondo (65) and is of the same circumference. All these are inhabited by Moors, who are compelled to give victuals to the Portuguese on the first day on which they arrive.

Of the revenues, which come from the coast of Mombassa, the principal are ivory, amber (?ambergris) and civet, which are obtained from the Caffres. All these are exported to India, but a great deal is often taken to Mozambique. There are large supplies of corn, rice and cows. This is one of the reasons why this part is of vital importance to the rulers of the coast, because without it, it would be impossible to supply the fortress of Mozambique—more especially at critical times.

The sources of revenue, which are taken to Mombassa from India, are principally cloth, which the Caffres and the Moors hold in particular estimation and which is an article which these lands lack. Iron and rice are likewise imported, though some rice is obtained in Pemba and a few parts of the coast.

To the north along the coast of Mombassa beyond the Bay of Formoza are Drugo (66), Brava (67) and Mogadoxo, which are Portuguese in name. They are all much afraid of His Majesty's arms. It is not permitted to sail from these places to the north or to the south-east without the licence of the Captain of Mombassa. The course from the Bay of Formoza to Cape Guardafuy lies to the north-east along the various bays and gulfs, which are to be found on the coast.

As already said, the winds and the monsoons are the same as for the fortresses of Mozambique and Sofalla (69).

There is nothing else to say of the fortress of Mombassa except that there is a piece of rising ground on the mainland on the other side of the harbour, which is called the 'Turks' Bastion (70). It can be seen opposite to the fortress, from which it is distant a cannon shot less thirty paces. It overlooks and unmasks the whole fortress. If it is held by enemies, who have artillery, great loss can be inflicted therefrom.

The moneys expended on this fortress and the revenue derived therefrom (71).

				Xarafins.	Tangas.	Reis.*
The Captain of Mombassa	...	...	...	400	0	00
The Factor	...	...	...	266	3	20
The Clerk of the Factory	...	...	...	166	3	20
The Ouvidor (72)	...	...	...	333	1	40
The Surgeon	...	...	...	133	1	40
The Master Gunner	...	...	...	80	0	00

* The Portuguese monetary table at this date was: 60 reis=1 tanga, 5 tangas=1 xarafin.



THE FORT TODAY, SEEN FROM THE BEACH.

[PHOTO BY COURTESY OF
MESSRS. C. D. PATEL & SONS, MOMBASA.



MAIN VIEW OF THE FORT.

[PHOTO BY COURTESY OF MISS H. C. E. MAY.

	Xarafins.	Tangas.	Reis.
The (Captain of the) Rounds	60	0	00
The Chief Bailiff	80	0	00
The Porter of the Fortress	80	0	00
The Four Bailiffs of the Factor	124	0	00
The Four Servants of the Chief Bailiff	124	0	00
The Accountant of the Customs House	109	4	00
The Father Vicar of the Mother Church (73)	200	0	00
The Vicars of Zanzibar and Ampaza each 60 milreis which is 120 milreis or 400 xarafins	400	0	00
The Convent of Saint Augustine (74)	333	1	40
Lodging allowance for ninety-four soldiers at nine xarafins for each lodging allowance every three months, including the following persons—the Porter, (the Captain of) the Rounds, the Bailiffs, and two Captains—one of Macupa and one of the Town—and (the Captain of) two ships to keep watch against the Turks, all of whom are soldiers, at three xarafins each per month—amounting yearly to	3,600	0	00
Two Portuguese Gunners at eleven xarafins, three tangas each for lodging allowance every three months and three xarafins each for subsistence each month	272	0	00
The Native Gunners at eleven xarafins, three tangas each for lodging allowance every three months and three xarafins each for subsistence each month	164	4	00
Four Masons, two carpenters and one blacksmith at six xarafins each per month	504	0	00
Eighty sailors at five milreis each per month and four ships' masters at ten milreis each per month for their cruise	792	0	00
Eighty sailors for their subsistence allowance one measure each per diem and four ships' masters three measures each per diem amounting in all for six months during which they cruise	990	0	00
Four officers of the Customs House at Pate, yearly	676	0	00
The hospital for the sick	500	0	00
The Governor of Mellinde two candils of iron and twenty-five score of linen cloth and			

	Xarafins.	Tangas.	Reis.
to the Mozungullos twenty-five score of linen cloth, which amounts yearly to ...	1,600	0	00
Whence it comes that the total expenditure for the fortress of Mombassa out of His Majesty's Treasury is yearly ...	16,097	4	40

REVENUE OF MOMBASSA.

	Xarafins.	Tangas.	Reis.
The Customs House of Mombassa before the rebellion yielded yearly to His Majesty 11,600 xarafins of which the third part was given to the tyrant king ...	9,000	0	00
The leases held by a few people which yield today ...	192	0	00
The King of Pate pays for tribute ...	150	0	00
The King of Ampaza the like ...	150	0	00
The King of Lamo pays the same as the two others ...	150	0	00
The Governor of Sio pays ...	75	0	00
All of which amounts yearly to ...	9,717	0	00
Hence it is clearly seen that the expenditure exceeds the revenue by ...	6,380	4	40

SUMMARY

	Xarafins.	Tangas.	Reis.
Revenue ...	9,717	0	00
Expenditure ...	16,097	4	40
Deficit ...	6,380	4	40

The one per cent and the consolidated duties, which are applied towards the fortification of the fortress, yield yearly six hundred and sixty milreis.

His Majesty has all the domains and palm groves in the island of Mombassa. These pay a rent or are let on lease. As there are at present few inhabitants, they yield more or less what has been above said. The majority of the population of Mombassa receive sixty candils of corn, as has already been mentioned.

His Majesty has all the amber, which the coast yields, and the opium and tobacco. The ships from Tuaca and Matuapa take all the ivory, which comes from the mainland. This pays a duty of one crusado for each frasila. This yields nothing at present, nor will it in the future, as the inhabitants of the land are not all in a state of peace.

The hired labour employed at the Customs House at Pate, Lamo and Mombassa is paid by the Factor out of the receipts of revenue of Mombassa.

APPENDIX I

Translation of the Inscription Over the Entrance Gateway to Fort Jesus, Mombasa

In 1635, Captain Francisco Siexas de Cabreira was made Commander of this fortress for four years, being then of the age of twenty-seven. He has rebuilt it afresh, made this guard chamber, and reduced into subjection to His Majesty the coast of Melinde which he found in revolt owing to the tyrant king. He made tributary the Kings of Tondo (a), Manda (b), Luziva (c), and Jaca (d) and punished Pate and Sio with a chastisement never expected in the Indies, even to the razing of their walls, and imposed a fine on the Muzungulos, chastised Pemba killing on his own responsibility the revolted rulers and all those of any repute, and made them pay the tribute which they had refused to pay to His Majesty, and for all these services he was made a nobleman of the household, as well as having been rewarded for other services with the

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- (a) "Tondo" is Utondwe, a fishing village a few miles south of Saadani in Tanganyika Territory. In 1528, when Nuno da Cunha was about to attack Mombasa "there met him the Lord of Otondo, a neighbouring town, offering to accompany him with a well-furnished vessel; being admitted, showing silver chains upon his legs, he said he wore them in remembrance that he had been wrongfully imprisoned by that king (sc. of Mombasa) and swore never to take them off till revenged, that all the motive his enemy had to use him so was his affection to the Portuguese, tho' he was never so happy as to serve them." (Sousa 1, 328.) It would appear from royal instructions which were issued to the Governor of Mombasa in 1598 that at that date the people of Utondwe were well-disposed towards the Portuguese. The instructions in question mention "Utondo" as one of the places at which married Portuguese settlers may reside. (Strandes, p. 368.) But as Siexas de Cabreira's inscription shows, the ruler of Utondwe took part in the general revolt of the Arabs in 1631. In 1652, there was a fresh revolt and once more Siexas de Cabreira was called in to suppress it. In the following year he proceeded to Zanzibar and expelled the "Queen" of the island and "her son, the King of Otondo." According to native tradition Mwana Mwema was the queen in question and married Abdulla, King of Otondo. (Strandes, page 229; Ingrams, p. 148.) In December, 1698, a relieving squadron from Goa arrived off Mombasa to find that Fort Jesus had fallen into the hands of the Arabs. After raiding some Arab traders at "Otondo" the fleet returned to Goa. (Strandes, p. 268.) The connection between the former rulers of Utondwe and the former rulers of Zanzibar might well repay further research. According to native tradition, the horns and drums of the Mwenyi Mkuu, the former lord of the Wahadimu of Zanzibar, originally came from Utondwe. (Ingrams, p. 152.)
- (b) An island lying east of Lamu.
- (c) In a map in Strandes following p. 347, Luziva is placed on the mainland at the northern end of Formosa Bay.
- (d) This place is probably identifiable with Shwaka on the mainland at the north end of Formosa Bay.

Order of Christ, a pension of five thousand reis and the Governorship of Jafmapatao for six years, and that of Biligao for four years, with the power of naming his successor, during his life and after his death. Pedro da Silva being then Viceroy in the year 1639 A.D.

APPENDIX II

The Mombasa Establishment in 1606

The full title of the *Livro de Fazenda* from which the following extracts are taken may be Englished as follows: "Book in which is contained all the revenue (*fazenda*) and royal patrimony of Portugal, India, and the adjacent islands belonging to the Crown..... put in order by Leuiz de Figueiredo Falcao, his secretary, in the year MDCVII." On p. 96, the following particulars are given of the establishment at Mombasa:—

	\$	Reis
Captain of the Fort	300	000
One Hundred men of the Garrison	930	000
Expenses of the sailors of the look-out ship for the Turk	518	760
Maintenance of the people who are in it	355	500
Hospital of the said fort for one year	360	000
Provisioning of the fort each year	120	000
Vicars of Lamu, Pate, and Ampaza	90	000
Fathers of Saint Augustine who reside there	40	000
Factor	68	000
Clerk of the factory	50	000
Ouivdor of the fort: 333 xarafims* 1 tanga 40 reis by direction; 208 xerafims* to the Land Bailiff of the place	162	500
Chief Gunner and his companions	60	000
Judge of the Custom House and four Bailiffs (<i>naiques</i>) thereof	98	000
Port of Gate and six Watchmen of the Fort	82	000
Paid for the maintenance of the officials of the fort	102	900

On p. 98 mention is made of the fact that out of the customs revenue one-third part was given to the King of Malindi.

* Even in a modern Portuguese dictionary "xarafim" also appears as "xerafin" and there are other variants besides this. The British Museum manuscript is not well written and it is sometimes by no means easy to say which of the many variants has been employed. There is no consistency in the spelling of the word.

APPENDIX III

*Description of the Island of Mombasa and its Harbour by
Manoel Monteiro*

(Add. Ms. 28, 461, f. 171)

Mombasa is in latitude four and one-third degrees South. It is a piece of low lying land by the side of the sea, but on the north side on the mainland there are three mountains by which it can be recognised.

The island of Mombasa has two harbours into which ships of a large size can enter. That of Tuaqua has sufficient water both at high and low tide and can be entered both when the N.N.E. and the S.S.W. winds are blowing by steering W. by a quarter S.W. and E. by a quarter N.E. and E. for the most part of the way so as to arrive to windward, having taken due precautions as regards rocks.

A ship, which is entering, should keep a lookout for the sandbank on the north-west side and, steering W. by a quarter S.W. make for the point at the entrance of Tuaqua, which is a cannon shot from the pillar on the island, which is a landmark of nine fathoms (height) and is of stone and has two apertures in the middle of it.

Then keep the pillar to the north and there will be eight fathoms sand and rock bottom in mid-channel. Then steer W. by a quarter N.W., keeping the pillar one-quarter N.E. You arrive at a spot, which is a cannon shot from the island and a cannon shot from the mainland to the S.W. Here there is a good landing place in five fathoms. A ship can anchor here in seven fathoms in mid-channel.

Less than five fathoms from the point there is excellent anchorage in a cannon shot of land. A ship keeps in mid-channel in twenty fathoms and then, as the channel narrows, there is a small minaret on the island, which is hardly a cannon shot away, and the mainland is the like distance. Here there is a good anchorage for a ship calling in the course of a voyage in twelve fathoms sand. There are also some houses here close to the island.

This description was compiled by Manoel Monteiro by the order of Count E.M. at Mombaza the first of April (fifteen hundred and) ninety-three.

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NOTES

- (1) "Mozungullos" is clearly a Portuguese corruption of the Kiswahili word "Wa-Langulo." The tribe in question is evidently the Wa-Sania, who now live on the banks of the Tana River. It would appear that they have been ousted from the hinterland behind Mombasa by the Wa-Nyika and the Wa-Giriama at a comparatively recent date. The neighbouring tribes call the Wa-Sania the "Wa-Langulo." (New pp. 278, 483, Hobbey p. 28). The "Monhicas" (Wa-Nyika) do not appear in Portuguese writings until 1728. (Tissuary II. 235.)
- (2) The date should be 1594.
- (3) The constructor of Fort Jesus was Matheus Mendes de Vasconcellos, who was appointed Capitao-Mor of the Malindi Coast in 1591. (Add. Ms. 20,861, pp. 124-141, 171, Archivo III Pt. I p. 379). The N.E. bastion appears to have been named after his patron saint. Formerly there was a coat of arms engraved on the walls of this bastion. (Kersten I, 335, 336.)

- (4) Albert the Pious, Archbishop of Toledo, and son of the Emperor Maximilian II, was Viceroy of Portugal, 1594-1596. The S.E. bastion is evidently named after his patron saint. There was formerly engraved on the bastion an episcopal mitre surmounting the double eagle of the Holy Roman Empire. (Kersten I. 335,336.)
- (5) Philip II of Spain, at one time husband of Mary I of England, usurped the throne of Portugal in 1580 and held it until his death in 1598. The S.W. bastion is evidently named after his patron saint. The inscription "Bhlyte S. Phelipe" used to appear on the wall of this bastion and in this connection it should be noted that the spelling "Phelipe" is Spanish and not Portuguese. Formerly the quarterings of the Kings of Castille and Leon appeared above this inscription. (Kersten I. 335,336.)
- (6) As Rezende states, Mathias d'Albuquerque was Viceroy of India during the period when Fort Jesus was under construction. The N.W. bastion appears to have been called after the Viceroy's patron saint. Later records sometimes refer to it as the "flag bastion." A plan which was formerly in the State library at Munich shows a flag of the Order of Christ flying from this bastion. (Strandes p. 162.)
- (7) Rezende evidently intended to depict this gateway in his pictorial plan, but he does not appear to have done so. According to Guillaing III. 252 there was in 1846 a gateway in one of the angles of the breastwork.
- (8) Archivo III. 671 records that in the course of excavations in 1596 a well was discovered one hundred and fifty paces from the walls of the fort. The Viceroy, Francisco da Gama, who was wintering at Mombasa at that time, gave orders for it to be connected with the fort by a covered way. During the three years' siege of the Fort by the Arabs (1696-1698) the defenders obtained part of their water supply by lowering buckets over the wall down to a well in the moat. (Strandes p. 247.)
- (9) Dom Jeronimo Chingulia, who is referred to in the inscription above the present entrance to the Fort as the "Rei Tirano" (tyrant king), was originally known as Yusuf bin Hassan and was the son of the king of Malindi and Mombasa. He was taken as a boy to Goa and brought up in the Christian faith. He returned to Mombasa in 1630 and soon quarrelled with the Portuguese governor of the Fort. In 1631 he surprised the Fort and massacred all the Portuguese in Mombasa except five persons who managed to escape to Pate. His revolt was the signal for a rising along the whole length of the East African Coast. He himself was unsuccessfully besieged by the Portuguese in Fort Jesus. Eventually he evacuated the island, but continued to stir up trouble in East Africa until his death in 1637. The inscription which can now be seen over the entrance gateway of Fort Jesus, commemorates in detail Francisco Seixas de Cabreira's ruthless suppression of that revolt. (Coupland pp. 63-65, Strandes pp. 195-217, Sousa III. 330-411, Foster 1637-1641, C.S.P. p. 390.)
- (10) The Count de Linhares was Viceroy of India at the time of the rising of Yusuf bin Hassan in 1631. Rezende was his secretary and it was on the Count's instructions that the Livro do Estado was drawn up.
- (11) Sc. Anjouan or Johanna, one of the Comoro Islands.
- (12) Manoel de Menezes was in 1616 attacked by six English ships off Johenna. His ship was eventually dismasted and driven ashore where it became a total wreck. His opponents paid a high tribute to his courage in fighting his ship and his steadfast refusal to surrender. (Purchas IV. 302-204, IX. 5-10, Danveas V. 140-161, Sousa III. 252-253.)

- (13) In 1936 Jeronimo Chingulia (Yusuf bin Hassan) (cf. Note 9) was using the N.E. coast of Madagascar as a base for his operations. An expedition was sent against him from Mozambique under the command of Roque Borges. Dom Jeronimo had taken up a fortified position, but evacuated it on being attacked by the Portuguese, leaving behind a certain amount of artillery. Some of this artillery had originally been taken from Fort Jesus. Sousa III, 394-395, 410-411.)
- (14) The quintal was equivalent to one hundred Portuguese pounds or about 102 English pounds.
- (15) The alquier was equivalent to about 23 English gallons.
- (16) The larim was a silver coin with a value fluctuating between 75 and 80 reis. (Strandes p. 331.)
- (17) The xerafim was a coin current in the Portuguese Indies and worth about 300 reis. (Strandes p. 331.)
- (18) The crusado fluctuated very much in value at different times and in different parts of the Portuguese dominions. (Strandes pp. 327-330.)
- (19) The three forts are depicted on Rezende's pictorial plan. Von der Decken gave the following description of the central and largest of these forts. "The fort itself is built foursquare, fifty feet long and broad and twenty feet high. There are three large loopholes facing the sea; a fourth has been made in a niche of the entrance door. A ruined tower on the sea side served as a look-out post." In 1861 this building was used as an octroi for the levy of duties on imports from the mainland. At that date the other two ports were in a ruinous state. (Kersten I. 207,336.)
- (20) The Captain of Makupa was not necessarily of commissioned rank. In 1622 the fort was held by a nephew of Francisco de Souza Pereira, the Governor of Mombasa. (Add. Ms. 20,869 f. 131), but in 1667 the fort was given to a sergeant, who had performed meritorious service in an attack upon some ships at Malindi. (Alley.)
- (21) When the Portuguese took possession of the island of Mombasa in 1594 they entrusted the defence of the Makupa crossing to their ally, the King of Malindi. (Strandes p. 338). It was probably at that date that the wall here mentioned was constructed. In 1609 the Governor of Mombasa complained that the fortifications constructed by the King of Malindi were quite ineffective. (Add. Ms. 20, 864 f. 258). In 1622 the Portuguese themselves took over the garrisoning of the position. (Add. Ms. 20, 869 f. 121.)
- (22) Portuguese records refer to more than one extensive raid by the Mozungullos on the island of Mombasa. Two such raids took place in 1612 and 1614. In 1625 the raiders murdered Francisco de Souza Pereira, who was then governor of Mombasa. (Add. Ms. 20, 870 f. 155, and 20, 898 f. 119). Writing in April, 1667, William Alley refers to "the Musungoolas, the inhabitants of the maine continient who now and then (never the less) are so bold to venture over and sack the towne, whole the Portuguese are forst for their safety into the Fort, as happened about six months since."
- (23) Tuaca is the name given to the western harbour of Mombasa in all earlier Portuguese records. In the accounts of the recapture of the island by the Portuguese in 1728 it is called for the first time "Quilindine" or Tuaca harbour. (Tissuary II. 256.)
- (23a) So called after the Augustinian Convent of Saint Antony, which stood upon its banks (cf. note 74.)

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- (24) As will be seen later, this payment was more or less in the nature of blackmail and was intended as an inducement to the Mozungullos to refrain from raiding the island.
- (25) It would appear that in his pictorial plan Rezende intended to differentiate between cultivated and uncultivated land on the island by depicting different kinds of trees.
- (26) The Candil was a measure of weight in the Persian Gulf, but in its present context it is clearly used as a cloth measure (cf. also note 50.)
- (27) Matuapa=Mtwapa, a village six miles to the north of Mombasa.
- (28) The frasila was apparently at this date equivalent to 35 or 36 English pounds.
- (29) The pardao was in origin an Indian coin.
- (30) Ampaza=Faza on the island of Patta.
- (31) Lamo=Lamu.
- (32) Sio=Siu.
- (33) Zemzibar=Zanzibar.
- (33a) Sousa III. 387-395 describes how "Manazonga," king of the "Mozungoes," came personally to the assistance of Jeronimo Chingulia (Yusuf bin Hassan), when a Portuguese expedition under the command of Francisco da Maura set out from Goa in 1632 to recapture Mombasa. During an attempt to capture and hold a house which was just outside the town and "defended by some blacks, three battalions of blacks beset the house and pressed those within so vigorously, that we lost 28 men, besides many wounded, among which was D. Francis hurt with 24 arrows, 7 of which were mortal, as being poisoned, if the limb be not cut off or the blood sucked. A servant sucked those wounds and died, but saved the life of D. Francis."
- (34) A pangayo was a small ship of Indian construction.
- (35) Though there had been no Turkish incursion into the Indian Ocean since that of Mirale Bey in 1589, the Portuguese were in constant fear that Mirale Bey's exploits might be repeated by one or more Turkish galleys from the Red Sea.
- (36) Straits of Mecca=Straits of Bab-el-Mandeb at the southern entrance to the Red Sea.
- (37) Diu is an island lying off the southern end of the Kathiawar peninsula. It is still a Portuguese possession.
- (38) Damaun lies on the east side of the entrance of gulf of Cambay. It also is still a Portuguese possession.
- (39) Bassein lies on the west coast of India just to the north of Bombay.
- (40) Chaul also lies on the west coast of India slightly to the south of Bombay.
- (41) As in the inscription over the gateway of Fort Jesus, Pate took part in Don Jeronimo (Yusuf bin Hassan's) rebellion and was punished "with a chastisement never expected in the Indies, even to the razing of its walls." In 1648 Pate was once more in a state of rebellion (Strandes p. 228). Though once or twice thereafter the place returned temporarily to its former obedience, the Portuguese sovereignty in Pate virtually ceased after 1631.
- (42) Local traditions say the Portuguese settled on a small island near Pate, which

- is known as Shaka Mzungu (Stigand p. 50). Brother Gaspar do Santo Bernardino, a Franciscan friar, who visited the island of Patta in 1606 makes no mention of any Portuguese settlement at Pate itself, but says he found Christians, Portuguese, "Gentiles" (Sc. Banyans) at Siu. (Bernardino p. 64). The wells at Siu are said to be of Portuguese origin. (Stigand p. 165.)
- (43) There appears to be no record or tradition of a Portuguese church having ever been built in or near Pate, but *Livro da Fazenda* shows that in 1607 provision was made for the stipend of a Vicar at Pate as also at Lamu.
- (44) One of the gates of the old walled town of Pate was called Lango Fandikeni (cf. Portuguese "alfandega"—customs house) and possibly indicates the site of the Portuguese customs house (Stigand p. 162.)
- (45) The town is said to have been under the ruler of Pate and to have been ruled by a body of Wazee (elders) appointed by him (Stigand p. 166.)
- (46) In 1606, Brother Diogo do Spjiritu Santo was at Faza, and had already lived there many years. The local ruler, "Mubana Mufame Luwale," had greatly assisted him in the building of the Church. (Bernardino pp. 62-64). In 1623 Jeronimo Lobo, the missionary explorer, found four clergy and seventy Christians attending a small church at Faza. (Strandes p. 175.)
- (47) The "Banadao de Banaxeque," prince of Faza, threw in his lot with the Portuguese during the three years' siege of Fort Jesus, 1696-1698, by the Arabs of Oman. At one time he was left in command of the remnants of the defending garrison, all the adult male Portuguese having died of disease. He was driven into exile after the fall of Mombasa and assisted the Portuguese in the recovery of the place in 1728 (Strandes pp. 261-265, 277; 281, 292, 294.)
- (48) The friendship between the Portuguese and the rulers of Malindi dates back to Vasco da Gama's first visit to East Africa in 1498. The rulers of Malindi assisted in the final capture of Mombasa in 1592 and were thereafter recognised as the native rulers of Mombasa.
- (49) Rezende is referring to the visit to Pemba of Alexander Sharpey in the *Ascension* in 1608. The English version of the incident is given in Astley I. 339-341. Pyrad de Laval II. 265, Jourrain's *Journal*, III. 61-68.
- (50) Cf. Note (26) where the candil is evidently used as a cloth measure. As a measure of weight the candil was equivalent to about half a ton.
- (51) The "Mossegejos" are the Wa-Segeju, one of the tribes of the Wa-Nyika. At the present time they live in the vicinity of Tanga. In 1589 they assisted the Portuguese and inhabitants of Malindi in the successful defence of that place against a horse of Wa-Zimba. In 1592 they captured Mombasa, which they handed over to the "king" of Malindi and which was by him delivered up to the Portuguese. (Guillain I. 402-409.)
- (52) The Portuguese league was 3755 1/15 geometrical paces or about 1½ English miles. The distances given by Rezende are far from being accurate.
- (53) For "North" one must of course read "South."
- (54) The "king" of Pemba was dethroned during the time of the incursions of Mirale Bey (cf. note 35). He had been reinstated by Matheus Mendes de Vasconcellos (cf. note 3), but in 1595 the inhabitants, "provoked by the villainies of the Portuguese, forced him and them to fly to Mombasa, after having killed many of them, and deprived the rest of the hope of ever returning to that island." (Souza III. 69). The fugitive "king" became a

Christian, married a Portuguese woman and went to Goa in 1596 (Burton II. 15). In 1598 the then "king" of Malindi—Mombasa put in a claim to be recognised as ruler of Pemba. (Archivo III. 913). As Rezende shows, his application was eventually granted.

- (55) The inscription placed by Francisco Siexas de Cabreira above the entrance gateway to Fort Jesus shows that person claimed that by 1639 he had "chastised Pemba, killing on his own responsibility the rulers who had revolted and all those of any repute." (cf. Appendix I.)
- (56) In Pemba the wild pig is the black European wild pig (*Sus scrofa*), whereas in Zanzibar it is the red Afrisan bush pig (*Sus potamochoerus nyassae*.)
- (57) The church was built on the site of what is now known as the "Portuguese Fort" in the town of Zanzibar. A report received by the Portuguese in 1710 stated that the Arabs had erected a "ridiculous fort" out of the materials of this church and the house of one Joao Nunes. (Strandes p. 276). A chart of Zanzibar in Dalrymple's *Collection*, which is dated 1774, bears a legend to the effect that this fort appears to be a ruined church.
- (58) "Monfia" is of course the island of Mafia.
- (59) "Saint Laurence" was the name given by the Portuguese to Madagascar.
- (60) The tanga was a coin current in Portuguese India. Its value in relation to the rei varied at different dates.
- (61) "Montondolos" would appear to be a Portuguese corruption of the Kiswahili word "Mtumbwi" meaning a fishing canoe.
- (62) "Quiloo" is Kilwa Kisiwani. Cabral first visited the island in 1500. In 1505 Francisco d'Almeida erected a fort there, but it was abandoned in 1512 owing to the unhealthiness of the climate. (Strandes pp. 53-65, 101-114.)
- (62a) Baumann, 1.8, says this statement does not agree with the native tradition which places the Portuguese fort at the end of the peninsula of Jojo on the north-west shore of Mafia opposite Kirongwe.
- (63) Baumann, 1.8, identifies "Anxoly" with Chole Shamba off the East coast of Mafia.
- (64) Bauman, 1.8, identifies "Coa" with Kua a village on the island of Juani off the south-east coast of Mafia.
- (65) Baumann, 1.8, identifies "Zibondo" with Jibondo off the south coast of Mafia.
- (66) "Drugo" is evidently a copyist's error for "Iugo," the name which appears on Rezende's map. "Iugo" in its turn is a mistake for "Juba."
- (67) "Brava" is Barawa on the Somali coast.
- (68) "Magadoxo" is Mogadishu on the Somali coast.
- (69) At Sofala in Delagoa Bay there are still the ruins of a Portuguese fort.
- (70) The "Turks' Bastion" appears in Rezende's pictorial plan as a square, flat-topped building on the north side of Mombasa harbour opposite to the Fort Jesus. The building itself is surmounted by two cannon. As the name denotes this fortification dated back to the incursion of the Turkish Commander, Mirale Bey, in 1587. Subsequently it fell into disrepair. It was restored in 1632, when a Portuguese expedition landed at Mombasa and attempted to recapture Fort Jesus from the "tyrant king," Jeronimo

Chingulia (Yusuf bin Hassan), and two ten-pounders were mounted thereon, but "the Moors of the continent attacked it by night, killed 2 of our men and wounded 6. At last the battery was found to be useless, so all was shipped again." (Sousa III. 387-395). During the three years' siege of Mombasa (1696-1698) the Arabs of Oman re-erected the battery and were thereby enabled to prevent at least one Portuguese relieving squadron from entering Mombasa harbour. (Strandes p. 263.)

- (71) The establishment as shown by Rezende may be compared with that in 1607 in the *Livro da Fazenda* (c. Appendix II.)
- (72) "Ouvidor" mean literally "one who hears." It appears to be used here in the sense of "Judge." In 1622 directions were given by the King of Portugal that the ouvidor of Mombasa was to act as judge of the customs house in place of the factor. (Add. Ms. 20,868 f. 80, 20,869 f. 72.)
- (73) The Mother Church of Mombasa is depicted in Rezende's plan on the landward side of the broad street marked "Cidade dos Portugezes" (Portuguese town) and adjoins the wall which separates that town from the "Moors" town. The building is surmounted by a cross. The first "Father Vicar" appears to have arrived at the same time as the Portuguese garrison in 1594. He was there in 1596 when the Viceroy, Francisco da Gama, wintered at Mombasa. The Church was intact when the Portuguese recovered Mombasa in 1728 (Tissuary III. 64). The Church was, however, in a state of ruin one hundred years later when it was used as the burial place of four members of the crew of H.M.C. "Leven," namely Lieutenant John James Reitz (Civil Governor of Mombasa, died May 29, 1824), Seaman Green (died August 28, 1824), Corporal James Smith, R.M. (died September 23, 1824), and Midshipman George Philips, collector of customs and sworn interpreter (died March 8, 1825). Boteler II. 185, 186, Emery—Diary September 23, 1824, and March 8, 1825). In 1846 Guillain found that the church had been converted into a cow stall and was known as the Igereza ya Ngombe (the cow church). Guillain managed to rescue what was apparently a carved piscina amongst the ruins and subsequently conveyed it to Mayotté. (Guillain III. 222-225.)
- (74) Rezende's plan depicts the Augustinian Convent on the banks of Mombasa Harbour in an enclosure surrounded by a V shaped wall. It was established in 1597. The members of the community were White Fathers of the Order of Saint Augustine. The Convent was dedicated to Saint Antony of Padua, who had been a member of the Order. (Bernardino pp. 45-52,—Add. Ms. 20,868 f. 128). In 1631, after Yusuf bin Hassan (Jeronimo Chingulia) had surprised Fort Jesus and murdered the inmates, the remnants of the Portuguese took refuge in the convent and held out there for seven days. They then surrendered on a promise of their lives but, with the exception of four Augustinians and a layman, who managed to escape in a boat, they were all put to death. (Strandes pp. 198200). Guillain found extensive remains of the Convent in 1846. Two buildings appeared to be more or less intact. One, called the Igereza Mkuu (big church), was then inhabited by the Kadhi and the other called Igereza Mdogo (small church) was inhabited by members of the Mazrui family and had adjoining it the grave of Suliman bin Ali El Mazrui, who was governor of Mombasa from 1823 to 1825 and died in 1839. (Guillain III. 221.)

SKETCH MAP OF MALAGARASI SWAMPS

PROVINCIAL BOUNDARY: ---
 AREA UNDER PERMANENT WATER: |||||
 AREA ANNUALLY FLOODED IN RAINS: |||||
 MILES: 0 1 2 3 4 5



The Valley and Swamps of the Malagarasi River, Western Tanganyika Territory

By Captain C. H. B. Grant

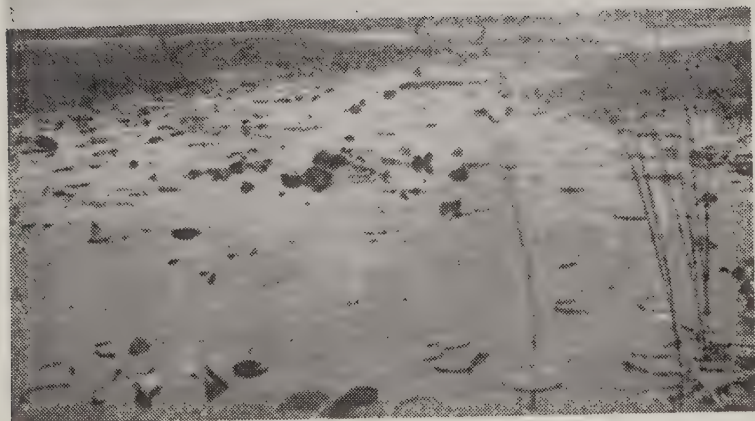
Within the Kigoma District, five rivers, the Luichi, Malagarasi, Lugufu, Luegere, and Lugosa, flow into Lake Tanganyika; the longest being the Malagarasi which, rising within seven miles of the lake shore, flows north east for over sixty miles, and turning south at what the Germans described as the "Malagarasi Bend," flows south and south east for some 110 miles, changes its course to the west at Malagarasi Station on the Central Railway line, and enters the lake about 25 miles south of Kigoma, and some 75 miles from Malagarasi Station; carrying with it the bulk of the drainage of the Kasulu and northern areas of the Kigoma Districts. North of Malagarasi Station the water from the north along the Tabora boundary, and from the Gombe in Tabora Province—passing through two narrow channels, the Mwanga and Kwiwega—join forces with the Malagarasi and form those vast swamps and flooded plains that extend for some 35 miles east and west, and some 20 miles north and south. Eleven miles south west of Malagarasi Station the waters of the Sindi, which, by other names, comes out of the Tabora Province, flows in from the east through dense papyrus and other water plants, and at flood seasons spreads northward over the Sibwe Plain to the railway line. Where the railway crosses the river by the Malagarasi bridge, the river is open and deep, being not less than eighty feet wide, and leads one to believe that the navigation northwards should present no serious difficulty, but about ten miles up river the "runner" grass has grown completely over the river and navigation ceases; below this grass the river runs deep and clear, but to the eye the course of the river is only apparent by the grass looking greener than the surrounding plains. Between Katulika and Kisasa Islands the course of the river is lost, but northward from Kakobi to the Kasulu-Kibondo crossing, the river is open and navigable.

The swamp area of 700 square miles is, at the end of the rainy season, a wilderness of sheets of open water, floating grass, papyrus, and reeds, the home of innumerable water birds both resident and migratory, Sittunga, Hippopotamus, and Crocodiles. Thousands of flowers, blue and white, of the water lily (*Nymphaea stellata*), the dainty small white feathery *Limnanthemum thunbergianum*, the crimson flowers of the *Ipomoea aquatica*, the bright yellow flowers of the *Boottia*, pink and white convolvulus and others give colour to an otherwise sombre landscape. In the shallow waters we pole through acres of the wild rice (*Oryza sativa*). One of the most remarkable features is the floating grass, which moves about at the caprice of the winds, and is a great danger to naviga-

tion; at least one canoe and its occupants having disappeared in recent years by being caught between these floating masses. When I arrived at Kisasa Island from the north on the 8th May, 1926, I canoed across a mile of open water, and an eastern breeze was getting up. Two hours after I landed, this wind had brought with it a mass at least a mile square, obliterating completely the open water I had crossed, and altering the landscape out of all recognition. Towards nightfall this mass started to move northwards, leaving clear water along the edge of the island, and by next morning a dark line to the northwards was all that could be seen; and doubtless the route by which I had entered the open water at Kisasa was impassable. The perennial swamps rest on a hard sandy bottom in the east, and elsewhere on mud or rock, probably gneiss; and in the dry season are nowhere very deep. Crossing the perennially flooded plains in the dry season, where Zebra, Topi, Buffalo, Roan, and Reedbuck are seen, our thoughts at once turn towards how many head of cattle could be run on these grasslands. Actually the cattle areas are very small indeed, being confined to the grasslands between the limits of the annual floods during the wet season, and the tsetse infested bush and open forest. In the wet season the plains can only be crossed by canoe, and for many miles the only dry spots are the tops of the tree or bush covered ant heaps, and even many of these are completely submerged. At the Kakobi crossing of the Malagarasi there was ten feet of water in May, over the spot where my wife and I pitched our tent on the west bank, in the previous October. The water at this time of the year is moving slowly, but perceptibly southwards, and owing to this fact I was not troubled with mosquitoes; which I only found at the edge of the flooded areas where the water becomes stationary in the tracks, cattle paths, and small hollows. The difference in level across this area is only fifty feet, and the islands of Katulika and Kisasa are only about 50 to 100 feet above this. It is surprising to find two such islands tucked away in the centre of this swamp; Katulika can be reached on foot from the west in the dry weather, but Kisasa is cut off at all seasons, and can only be reached by canoe. The former island is covered in open forest, but the latter is open with sandy soil, and carries a good herd of cattle. Cattle are swum across to the mainland, their heads being held by the occupants of the attendants canoes; and I was informed they seldom lose a beast. In this north eastern corner of Uvinza the sandy soil of Tabora District encroaches into the District, and it is the only place where the giraffe and kudu are to be found.

The western reaches of the Malagarasi differ markedly from those in its central and upper course, for here it is broken into islands, rapids, and waterfalls, forming pictures of both beauty and grandeur.

The rocks well above the present level on the southern scarp of the Malagarasi, show marks of either a former wider and deeper river, or the erosion and lowering of the river bed—which may be due to the general fall of the level of Lake Tanganyika.



KATULIKA SWAMP in June 1926.



Bark canoe on Katulika Swamp.

S.S. "Liemba"

By Col. L. B. Cane

THE *Liemba*, flagship of the German flotilla upon Lake Tanganyika in the first world war, scuttled like their high seas fleet at Scapa Flow, twice raised, first by the Belgians and then successfully by the British, is today, in spite of her age, still the most handsome and popular ship upon that great lake.

Her history, although less adventurous than that of her companion, the little war-worn *Mwanza* (whose story, by Commander L. P. Lane, was published in 1938 in *Tanganyika Notes and Records*, No. 6), is worthy of record, and may be of interest to the many privileged to voyage on her down the length of Africa's most beautiful lake.

The materials for such a history still available in this country appear to be confined chiefly to various old German files and later records, which the Manager of the Tanganyika Railways has kindly put at my disposal for examination.

The Germans having by 1910 made rapid progress with their Central Railway naturally began to consider the further extension of their communications with Central Africa.

In June of that year their Government Surveyor requested the Railway Commissioner at Tabora to ascertain the dimensions of the British steamers on Lake Victoria, and to advise upon the measures which should be taken to provide a service on Lake Tanganyika.

It would be good, he wrote, to provide three steamers for this purpose, and he inquired as to the costs of building one in Germany, including its transport out to Dar es Salaam.

To this a reply was received that so far as was known the Lake Victoria steamers were of about 600, 800 and 1,200 tons, and later that the s.s. *Nyanza* had a displacement of 1,146 tons, and could carry up to 600 tons of cargo.

It was recommended that a ship of about 1,000 tons should be provided, with a draught of about four metres, to enable it to anchor 400 to 500 meters off the land at most of the places, although at Usumbura he added that the anchorage must be further out.

The cost of such a ship was estimated as from 400,000 to 500,000 marks in Germany.

Considerable correspondence then took place about the engines, whether these should be oil-burning Diesel engines or constructed for fuelling with wood or possibly coal. In this connection a letter in March,

1911, was sent to the Director of the East African Railway Company, Berlin, referring to a lecture by Dr. Eng. Diesel, published in an account of meetings of the Colonial Economics Committee.

In view of this it was urged that diesel engines would be preferable, and that the Government should seriously consider this, especially if the experiments they were making to see whether groundnut oil or palm oil could be used for combustion were satisfactory. With this letter is an extract from *Das Echo*, Vol. XXXI, No. 1546, dated 18th April, 1910, maintaining that "oil engines will gain great importance for ship purposes," and referring to firms in Germany and Switzerland who specialized in their construction.

Another newspaper extract referred to an expedition for the introduction of oil-burning steamers on the great African river basins of the Congo, and inland lakes, and for experimenting upon the use and preparation of colonial vegetable oils for fuelling ship engines.

The suggestion for oil-burning diesel engines was, however, abandoned owing to the expense of machinery for local oil production.

It may be of interest here to note that the replacement of the wood-burning engines by diesel or electric turbine engines for the *Liemba* is now, thirty-five years later, under consideration by the Tanganyika Railways.

CONSTRUCTION

In January, 1913, information was received from the Director of the East African Railway Company, Berlin, that the first twin-screw cargo and passenger ship for Lake Tanganyika had been ordered from the shipyard of Messrs. Jos. L. Meyer at Papenburg on Ems, at a cost, delivered free at Emden or Hamburg, of 406,000 marks (approximately £20,000 at the then current rate of exchange).

Payment was asked for in five instalments, the first to be payable on receipt of the order, and the last upon delivery at Hamburg. This was expected by the end of 1913.

A certificate from the German Lloyd, dated 14th April, 1913, stated that with the dimensions given by the firm: length 67 metres, width 10 metres, height from waterline 3.4 metres, draught 3.2 metres, engine of 500 h.p., screw diameter 2 metres, with rotation 155 per minute, etc., the ship could "in a calm sea and without contrary wind" attain a speed in deep waters of 9.5 knots.

In this connection it may be of interest to note that on her trials in June, 1915, only 7 knots was attained, and the highest recorded speed on the lake was 9 knots on two voyages from Usumbura to Kigoma.

At her trials after salvage an average speed of 8.5 knots was main-

tailed, although in 1938 the Marine Superintendent reported an average of only about 6 knots.

Whilst the ship was under construction at Papenburg, it became necessary to push forward the completion of the railway from Tabora, and of the quays and slipway at Kigoma, in preparation for the reconstruction of the ship upon its arrival.

Two lighters, of fifty tons each, were also under consideration. These were to be put together as far as possible in Dar es Salaam.

Three whaleboats, at a cost of 6,000 rupees, delivered at Dar es Salaam, were also ordered for use on Lake Tanganyika.

A suggestion was made that the Malagarasi might become an important feeder to the railway. Acting Imperial Governor Humann reported to the Colonial Secretary, Berlin, that a preliminary survey on this river indicated no real obstacles such as falls on rapids on the whole way as far as the Uha Highlands.

On the 20th September, 1913, the Director of the East African Railway Company, Berlin, recommended to the Colonial Office that a second steamer be ordered from the same firm. The cost of this, it was stated, would be 16,560 marks cheaper because prices had dropped, and several moulds could be used again. To this sanction was given on the 20th October and this second ship ordered.

In reply to an inquiry as to the names to be given to these two ships, the Secretary of State for the Colonies wrote on the 7th November, 1913: "I herewith assent that the first two steamers for Lake Tanganyika, instead of *Graf von Götzen* and *Freiherr von Rechenberg* should be named only *Götzen* and *Rechenberg*."

SHIPMENT

Messrs. Meyer, who had promised delivery of the first ship before the end of the year, had meanwhile made good progress, and, on the 26th November, the Director of the East African Railway Company, Berlin, reported to Dar es Salaam that it had been completed, and that the shipyard was then occupied with taking it to pieces and packing it, under the supervision of Herr Hubner, Chief Engineer.

Shipment would be in three consignments, the first to be sent off by the steamers *Feldmarschall*, *Windhoek* and *Adolf Woermann*, leaving Hamburg on the 19th December, 12th January and 27th January, preceded on the 19th December by a shipment on the *Admiral* of stocks, slips and scaffolding required for the reconstruction at Kigoma. This first consignment sent out would include the "pieces necessary to set the ship in ribs," that is, the bottom, ribs, sheers, bulkheads, deck-pillars, deck-beams, and rivets.

In the second consignment, to be sent out later, would be found the masts, boilers and machinery installations, with accessories.

The third consignment would include boarding for cabins, upper works, deck houses, inner installations and furniture, and all spare parts required.

This letter was accompanied by a detailed inventory of all this material, with cost of transport, apparently totalling 16,912 marks.

The need for urgency in getting the ship out to Tanganyika, doubtless in view of events expected in 1914, is indicated by a telegram from the Governor to the Colonial Office in December, 1913:—

“Accelerate by all means sending slips, shipyard equipment, for *Götzen* with the latest mounting instruments. Send with twenty skilled ship-builders, if possible employees of the Railway. Economic interests and prestige demand urgency.”

A letter dated the 5th November, 1913, however, stated that as the terminus of the railway was still thirty-four kilometres from Kigoma the pieces of the ship “cannot leave Dar es Salaam before the end of January.”

REBUILDING AT KIGOMA

Eventually all the parts and equipment safely reached Kigoma, and most of 1914 was occupied with the reconstruction there of the ship

For the period 15th February, 1914, to 14th February, 1915, policies of insurance were taken out by Messrs. Wm. Brandt, Sons & Co., on behalf of Messrs. Schwartse Petersen & Co., Berlin. The total insurance was for £25,000, at a premium of a half per cent, that is, £125.

Twelve companies, all British, participated in this insurance, Lloyds being responsible for £8,500, the British and Foreign Marine Co. for £3,000, the Indemnity Mutual Marine, British Dominions, General Ocean Marine, and Canton Insurance Office for £2,000 each, the World Marine, Union Marine, Standard Marine, London and Provincial Marine, and Thames and Mersey Marine Insurance Companies, for £1,000 each, and the New Zealand Insurance Company for £500.

The policies state that they covered “all risks including fire, while under construction and/or fitting out... Also all risks of trial trips.”

Special endorsements stated that “notwithstanding these premiums, the policies are warranted free from any claim under Workmen's Compensation or Employers' Liability Acts, or damage by strikers.”

Also “warranted free of capture, seizure, and detention, and the consequences thereof, or any attempt thereat, piracy excepted, and also from all consequences of hostilities or warlike operations whether before or after declaration of war.” The British insurance companies were evidently

accepting no risks beyond those of damage or fire whilst under reconstruction in the peaceful port of Kigoma.

Except for the burning of a railway waggon loaded with materials for the ship, near Kazuramimba in August, 1914, the overland transport from Dar es Salaam was carried out satisfactorily, and good progress was made with the building on the slipway at Kigoma.

In March, 1914, a proposal had been made to fuel the steamers, and also the railway engines, with Lukuga coal from the Belgian Congo, transporting this from Albertville to Kigoma by lighters towed by the small vessel *Hedwig von Wissmann*, which "rolls in such a way that it is no pleasure to voyage in it." For this purpose two lighters of 200 tons would be required.

LAUNCHING AND TRIALS

A telegram in January, 1915, to the Railway Commissioner, Tabora, stated that the prospective date for launching *Götzen* was 25th January, but a letter to him, dated 18th May, stated that the maiden trip of the *Götzen* and the handing over of it to the Naval Expeditionary Corps could take place at the beginning of the following week. The Railway Commissioner was requested to be present at this ceremony, and on the maiden voyage.

This, however, had to be postponed because of a twist in the propeller shaft.

The trial trip took place on 8th and 9th June, in calm water between Kigoma and Lugufu.

On the first day, with fresh, unbarked wood, an average speed of only 7 knots was attained, but on the following day, with dry, barked wood from Kalago, 8.25 knots were obtained.

A report on this trial run, signed by Hillenkamp, on behalf of the East African Railway Company, and by Korvetten Kapitän Zimmer, the Naval Commander, mentions also that owing to lack of certain important parts the cooling, lighting, and electric installations were not in action, and that on account of the outbreak of war some compasses, an anchor, and some chains and lanterns had not arrived. Some of these deficiencies had been made good by the Railway Company, which had also supplied four boats, a portable boiler on the poop, and an iron cooking stove on the foredeck.

This report also states that the Military Command had put emplacements for one 8.8 cm. gun, and two 3.7 cm. guns, as well as armoured shields on the skylight and for the guns.

All alterations and installations made for military purposes were to be removed by the Military Commander on returning the steamer to the East African Railway Company.

The value of the steamer was stated to be about 750,000 marks (approximately £36,765). Since the price paid to the building company in Germany for the ship delivered free to Hamburg had been about £20,000 it appears that the cost of transport out and reconstruction at Kigoma was taken to be about £16,765.

This valuation of £36,765 is considerably less than the British cost of salvage and reconditioning twelve years later, exclusive of the Belgian costs for their unsuccessful salvage.

This trial run was of only thirty-three sea miles. A later report, dated 18th June, 1915, addressed to the Governor in Tabora through the Commander of Lake Tanganyika at Bismarckburg (now Kasanga), signed by Batzner, Lieutenant of the Reserve, describes the performance of the *Götzen* on what was described as "the first great trip to Bismarckburg."

This ship had a military transport on board, which together with the crew totalled about seven hundred men.

From time to time the water was rough, with a strong south wind.

On the 1st June, in the morning, off Kungwe Bay, the *Götzen* made no progress, and between 6 and 9 a.m. advanced barely half a mile. The insufficient engine power, 500 h.p., was unable to move the ship forward, and the screws, on account of the pitching of the steamer, frequently turned in the air.

Moreover, at 8.30 a.m. the mechanical steering apparatus, English made, ceased to function, and also the hand rudder was out of order.

On account of these circumstances, and owing to insufficient engine power and draught, the ship could not be steered by the engines alone, and was carried along by the waves and began to roll heavily, everything on board tumbling about.

The steamer was in danger, since if water should enter she would easily sink, as the hatchways were not tightly closed, and the bulkheads inadequate.

At 9 o'clock, however, conditions improved, and the steering apparatus again functioned.

Next day, however, at 3 a.m., off Utinta, both mechanical and hand steering apparatus had again ceased to function.

The steersman lost control of the ship, which turned round and began rolling and listing. The ship was then driven by the wind northward, towards Kigoma, about two miles off the shore, at a rate of about three or four miles an hour. Shipwreck was feared as possible, owing to the lack of a double bottom, and the insufficiency of the bulkheads.

At 4 o'clock, however, the defects were rectified, and in calm water



s.s. "Liemba" on slipway at Kigoma.

[PHOTO BY COL. L. B. CANE.]



s.s. "Liemba."

[PHOTO BY COL. L. B. CANE.]

the ship reached Bismarckburg at 7 p.m., the duration of the voyage from Kigoma having been fifty hours.

The report adds, however, that when all is calm the *Götzen* sails as if motionless, and the voyage is most comfortable.

On her first voyage the seven hundred passengers crowded on board, with apparently little cargo or ballast in the holds to steady the ship, must have been relieved to set foot safely on shore at last.

REPORT ON TRIALS

In forwarding this report by his Lieutenant to the Governor at Tabora on the 20th August, 1915, Captain Zimmer, the Naval Commander on Lake Tanganyika, gave details, in twelve sections, of many defects noted on the *Götzen* since the ship had been taken over. These may be briefly noted as follows:—

- (1) Draught insufficient.
- (2) No double bottom, and therefore danger of sinking, if, owing to imperfect knowledge of the lake, the ship should run aground upon rocks.
- (3) Bulkheads too few, and partitions between them too weak. The inrush of water into one section might, therefore, lead to total shipwreck.
- (4) In the new double bottom trim tanks should be built, since without them it is impossible to trim the ship.
- (5) There should be divisions in the holds, to prevent shifting of cargo in a storm.
- (6) Vibration excessive. The connecting rods should be stronger, to prevent vibration at fast speeds.
- (7) Engines too weak to make headway against a strong wind, during the heavy storms and seas frequent on Lake Tanganyika.
- (8) Steering installation very defective.
- (9) Berths too short and too narrow. When in bed your arms and legs touch the mosquito nets, and so get bitten by the mosquitoes hidden in great numbers in dark corners of the cabins. Recommended iron beds, which could be removed and cleaned, instead of the wooden berths, and the painting white of all the dark wood.
- (10) Derricks too short. Each hatch should be provided with two sufficiently long derricks.
- (11) Boat davits should be placed upon the upper deck, and made of steel tubing. Fastenings of the davits to the deck too weak.

In the report on handing over to the military the following defects

noted upon the trial trips were noted for the East African Railway Company to put in order:

- (i) Rudder connections.
- (ii) Bulkheads in front of boilers to be strengthened. —
- (iii) The boilers, constructed for coal firing, give insufficient steam pressure with wood.

The draught should be increased by lengthening the funnel by about two metres.

NAVAL ACTIONS

For the remaining history of the *Götzen* as a unit of the German fleet no official records are available. A detailed account of naval actions on the great lakes may be read in "The *Königsberg* Adventure," by E. Keble Chatterton, from which the following brief notes relating to those on Lake Tanganyika, and the fate of the *Götzen*, have been taken.

After the disabling of the *Königsberg* up the Rufiji river on the 11th July, 1915, its crew was split up.

Some became merged with the German East African military forces, and others, together with the crew of the small *Möwe*, scuttled in Dar es Salaam harbour on the 8th August, 1915, continued their naval activities on the lakes.

Thirty men of the *Möwe* contingent went by train to Kigoma, and went aboard the lake steamer *Hedwig von Wissman* (60 tons) arming her with four pom-poms brought from the *Möwe*; and Kigoma harbour was fortified against attack by lake.

This small ship attacked and put out of action the *Alexander Delcommune*, of ninety tons, off the mouth of the Lukuga river, and with the *Kingani*, a small wooden steamer of fifty-five feet that had come by train from the Indian Ocean, later destroyed two ancient British steamers, possessing neither engines nor boilers, whose hulls were lying at the southern end of the lake. They also raided Bismarckburg (now Kasanga), and captured four machine-guns and over ninety miles of telegraph wire from a Belgian company there, and bombarded and attacked various other lake stations.

So passed the first ten months of the war, by the end of which von Lettow was sending troops to Kigoma and thence down the lake to Bismarckburg. For this the newly completed *Götzen* proved most useful.

She was the largest ship on the lake, and could carry nine hundred men in a quarter of the time taken by the dhows.

A rival, however, was under construction near the mouth of the Lukuga river, the Belgian *Baron Dhanis*, which became the object of

repeated attacks by German raiding parties.

The final naval action against these raiders was fought by two very light motor boats *Mimi* and *Toutou*, and a small Belgian motor boat called the *Vedette*, with crews of British naval ratings.

The *Mimi* and *Toutou* had been built for the Greek seaplane service, and had been brought out from Teddington on the Thames to South Africa, and thence transferred overland to Kalemie, near the mouth of the Lukuga.

In this action, on Boxing Day, 1915, these small ships, under the command of Commander Spicer-Simson, attacked the *Kingani*, severely disabled her, and then escorted her to Kalemie, where she was later repaired and commissioned as a British man-o'-war, with the name *Fifi*.

Zimmer, having received no news of the fate of *Kingani*, on the 8th February, went with the *Hedwig von Wissman*, *Götzen*, and a pinnace to reconnoitre Kalemie. Unfortunately for them the last two were left temporarily near the eastern shore of the lake.

The *von Wissman* on approaching Kalemie was attacked by Commander Spicer-Simson's flotilla of small boats, his flag on the *Fifi*, formerly *Kingani*.

After an exciting engagement the *von Wissman* was sunk, and the *Götzen*, which had failed to come up in time for action, returned to Kigoma.

During June, 1916, the *Götzen* was bombed by Belgian aeroplanes, and when on the 26th July Kigoma was evacuated, owing to capture of the railway, the ship was filled with cement and scuttled off the mouth of the Malagarasi river. A small boat, the *Adjutant*, was blown up on the stocks, and another, the *Wami*, also sunk.

So ended the brief career of the *Götzen*, built in Germany at a cost of £20,000, transported in sections to Dar es Salaam, and by railway to Kigoma, rebuilt there in 1914, and a year later, valued at £36,765, handed over as an armed transport.

SALVAGE

While the Belgians were in charge of the Lake Province after the war they raised the *Götzen*, and towed her to Kigoma harbour, where, however, she again sank at her moorings, in fairly deep water.

The British Government took over at Kigoma from the Belgians in March, 1921.

At that time the only British vessel on the lake was the *Fifi*, the small wooden ship which as *Kingani* had been captured in the action off Kalemie in 1915. This had become unsafe and totally inadequate for the work required.

The forty-ton *Mwanza* had, after capture on Lake Victoria, been transported via Mombasa to Dar es Salaam, with the intention of utilizing her for supplying the troops operating on the Rufiji river. For this purpose, however, she had arrived too late to be of service, and so remained in Dar es Salaam dockyard. There she was rebuilt, and sent in sections by rail to Kigoma, where she was reconstructed and put into service on the 17th April, 1923. There she replaced the *Fifi*, which having been found irreparable was towed into deep water and, on the 19th October, 1924, sunk with flags flying and all honours.

As the Belgians had failed to salvage the *Götzen* before this part of the Territory was handed over, the sunken ship then passed into British possession.

On the 5th May, 1921, the Governor, Sir H. Byatt, K.C.M.G., wrote to the Secretary of State recommending that the vessel should be salvaged and taken over by the British authorities.

To this a reply, dated 13th October, 1921, was received from Mr. Winston S. Churchill, enclosing copies of "correspondence with the Treasury on the subject of the proposed salvage and acquisition by the Government of the Tanganyika Territory of the steamship *von Götzen*."

One of the accompanying letters, dated 27th September, 1921, stated that Mr. Churchill was "in full agreement with the view taken by the Governor," and requested that sanction might be given for the expenditure involved, "which it will be seen is now estimated at £7,500 only."

To this letter the Lords Commissioners of His Majesty's Treasury had replied, on the 5th October, 1921, giving their "authority for the proposed expenditure of £7,500 for this purpose from Colonial Revenues, subject to the following conditions:—

- (1) That this sum covers the whole cost of the service, including the wages, etc., of the salvage party.
- (2) That no increase in the grant-in-aid by way of loan already sanctioned towards the expenses of the Territory will be involved.
- (3) That a definite understanding is arrived at with the Belgian authorities, in order that no legal difficulties as to the ownership of the vessel, when salvaged, shall arise."

As to the Belgian claim this was settled for £4,173 9s. 6d.

The salvage, however, proved to be a much longer and more expensive operation than had been contemplated, and the total cost, including that of the abortive Belgian salvage, eventually reached a total approaching three times that of the original estimate.

The work of salvage occupied about two years, and was carried out successfully under the direction of Lieutenant-Commander T. Kerr, R.N.

On the 18th March, 1924, the Governor sent a telegram to the Secretary of State for the Colonies: "Salvage of *von Götzen* successfully completed on the 16th March."

Another telegram of the same date, to "Salvage Kigoma" read: "Congratulate you and your party on successful salvage of *von Götzen*."

After raising, the preliminary examination revealed that in spite of long submersion the damage was less than might have been expected, and on the 29th March, 1924, Colonel G. A. P. Maxwell, the General Manager, wrote that "the engines of the boat are reported to be in excellent condition," and "Commander Kerr tells me that there is no reason at all why the *Götzen* should not carry her full cargo at all times with perfect safety."

RECONDITIONING

The vessel having been raised, correspondence was then continued as to whether "to try and sell the ship as she floats for what she will fetch, probably to the Belgians," or whether the anticipated heavy expenditure on reconditioning, and the prospects of future Belgian and other traffic through this Territory, would justify, in Mr. Churchill's words, "the establishment of a Marine Service on Lake Tanganyika."

A report by the General Manager, dated 17th July, 1924, gave the estimated cost of running the ship, and of the goods traffic that might be expected from the Belgian Congo, Ruanda and Urundi.

Regarding doubts that had been expressed as to competition from the other services on the lake he wrote, "Surely we, the British, should enter into competition and not be dependent upon the Belgians for the service to our own southern ports and those of North-East Rhodesia."

On the 17th September, 1924, the Secretary of State wrote to the Governor, "conveying approval of your proposal for the reconditioning of the s.s. *von Götzen* for service on Lake Tanganyika," and called for "a full statement of the estimated cost."

This detailed estimate had already been prepared by the Chief Mechanical Engineer, K. C. Strahan, in May, and is of considerable technical interest.

His summary for the work required to put s.s. *Götzen* into a seaworthy condition, including reconditioning and refitting, complete with stores and tools, was—

		£	s.	cts.
For Hull, Accommodation, Decks, etc.	...	12,422	17	07
For Main Engines, Boilers and Machinery, etc.	...	7,481	0	00
Total	...	£19,903	17	07

This estimate, however, proved insufficient, and during the next three years additional funds had on several occasions to be applied for.

For the salvage and the reconditioning combined the total cost appears to have been—

(a) For salvage, by Belgians and British	...	...	£20,400
(b) For reconditioning, refitting and stores	...	...	£29,296
Total			£49,696

This total may be compared with the German cost of building in Germany, transport, and reconstruction at Kigoma, of approximately £36,000.

For the work of reconditioning skilled divers and shipwrights were required.

A letter from Mr. John Scott, the Acting Governor, dated 25th November, 1924, requested the Crown Agents to engage as diver a Mr. J. E. Shepherd, of Plymouth, at a salary of £75 a month, and five shipwrights at £40 a month, with free passages, quarters at Kigoma, and outfit allowances.

Eventually two divers, Mr. Laver and Mr. Davis, in addition to Mr. Shepherd, and three other men were engaged. It was not until two years later that they had completed their work and returned to England.

The wharf and slipway at Kigoma had also to be completed, at a very considerable cost.

On the 6th August, 1926, the General Manager stated that for these works £28,000 had been estimated: £15,000 for the wharf, £10,000 for the slipway, and £3,000 for a crane.

Leading marks and lights were also installed where required along the eastern and southern shores of the lake.

RE-NAMING

Meanwhile suggestions were being considered for re-naming of the *Götzen*.

The Chief Mechanical Engineer, on the 3rd March, 1925, wrote: "It has been suggested that the name should be changed to *Livingstone*, which would appear appropriate." This suggestion was approved by the General Manager, and by the Acting Governor, and on the 25th April, was recommended by the Governor to Lieut.-Colonel L. C. M. S. Amery, P.C., M.P., the Secretary of State for the Colonies.

Another suggestion, made by Colonel Maxwell, was *Kagaru*, the name

by which *Livingstone* was called throughout Rhodesia and Nyasaland, the meaning of which is "man with a little dog."

A third suggestion apparently had been *Mnyaka*, the meaning of which, however, the Acting General Manager had been unable to discover. The late Mr. C. Gillman informed me that the Swahili root *nyaka* means "catch," "intercept," or "pilfer," and that this suggested name for the ship may, therefore, have been meant for "prize."

All these suggestions, however, were discarded, and on the 8th January, 1926, the Governor, Sir Donald Cameron, wrote to the Secretary of State: "With reference to your despatch No. 331 of the 18th of June, regarding the renaming of the s.s. *Götzen*, I have to request that the necessary steps may be taken to have the vessel registered as *Liemba*, the name given by the natives to Lake Tanganyika when Dr. Livingstone first reached those waters."

RE-CHRISTENING AND TRIALS

At last, after several years work of salvage and reconditioning, the *Liemba* was ready for her rechristening and trials.

Special cards of invitation were printed, on which the Administration of the Tanganyika Railways requested the pleasure of the Company of many official and non-official guests "on the occasion of the official trial of the T.R.S. *Liemba*, and the christening of the vessel by Mrs. John Scott at Kigoma, on Monday, the 16th May, 1927."

Amongst the non-officials who accepted were General Olsen and the Belgian Consul at Kigoma, the representative of the Dar es Salaam Chamber of Commerce, Mr. O'Toole, and the Editors of *Tanganyika Opinion* and the *African Comrade*.

For the ceremony and subsequent festivities the Band of the 6th Battalion, King's African Rifles, forty men under command of an officer and sergeant, were brought up from Dar es Salaam.

The christening ceremony was followed by a short address of thanks to His Excellency and a presentation to Mrs. Scott, of a souvenir of the occasion.

Special thanks on behalf of the Railway Administration were also given to Mr. Shepherd and his salvage party, and to Mr. Halliday and Mr. Strahan for their excellent work.

This was followed by toasts to His Excellency and Mrs. Scott, and to the success of the *Liemba*.

During the trial run that followed a truly "pre-war" luncheon of seven or eight courses was served, with, of course, Champagne Pommery and liqueurs.

At the end of this speeches were made by the Acting General Manager, His Excellency the Acting Governor, and by the Commander of the *Liemba*, G. A. C. Sharpe, R.N., (Retd.).

The preliminary technical trials had taken place on the 9th and 10th May, under the supervision of the Chief Mechanical Engineer, who later issued a report that the results were regarded as satisfactory, and that the average speed maintained was 8.5 knots.

SERVICES

A regular service to the southern lake ports was commenced in July, 1947, and a new pier and Customs Station built at Mpulungu, the port for Abercorn.

Calls at Albertville and voyages to Usumbura in Urundi were also made, but of late years only British ports have been served.

Annual refits were carried out, and in February, 1938, the Marine Superintendent requested that as no reliable technical information about the ship was available the builders, Messrs. Joseph L. Meyer, might be asked to supply plans and specifications, with other particulars. Information was especially desired as to stability, and the absence of bilge keels (It will have been noted that Captain Zimmer had previously referred to the absence of these.) Also as to the horse-power of the engines, normal working pressure of boilers, and dimensions and pitch of propellers, as the ship "does about six knots, for which she does not appear designed."

To this suggestion the Crown Agents replied that Government would not be agreeable to correspondence being conducted with the German makers.

For nineteen years now the *Liemba* has maintained services between various ports on the lake, though the Compagnie des Grands Lacs, with its fleet of tugs and many lighters, and its concession at Kigoma quays, carry by far the greater part of the increasing commerce on the lake, and during this last war have run many extra voyages to transport thousands of troops and Greek and Polish refugees. For the *Liemba* and the little *Mwanza* are left only the traffic between the small ports on the east coast, and some through traffic to Abercorn. This route, however, will form an increasingly important link in continental travel, and with a future extension of the Rhodesian Railways from Broken Hill to Abercorn the direct route to the south would avoid the detour through the Belgian Congo.

Already, just before the war, Messrs. Thomas Cook and Son had reserved accommodation for twelve passengers for a projected Cairo to the Cape tour, and, with a return to more normal conditions an increasing tourist and business traffic may be expected. The *Liemba* then, with its

successors and future sister ships, will provide perhaps the most pleasant section of the route overland from the Cape to Cairo.

For the compilation of this history of *Liemba*, I acknowledge with thanks the loan of many old files by the Manager of the Tanganyika Railways, and for their selection and for other information I am grateful to that historian of Tanganyika, the late Mr. C. Gillman.

For details of the naval actions I am indebted, as previously stated, to Mr. E. Keble Chatterton's book, *The Königsberg Adventure*.

My thanks are due also to Father R. Baumann, of Ujiji Mission, as translator of many extracts from the old German records.

APPENDIX I

S.S. "LIEMBA"

Ship Measurements:

Length	...	...	220 feet.
Breadth	...	...	33 feet.
Depth	...	...	9 feet.
Tonnage	...	...	793 tons.
I.H.P.	...	...	300
Propeller diameter	...	...	5 feet 6 inches.
Propeller pitch	...	...	6 feet 10 inches by 24 feet.
Forward hatch	...	...	9 feet 10 inches by 20 feet 5 inches.
Aft hatch	...	...	9 feet 10 inches by 20 feet 5 inches.
Promenade deck	...	...	90 feet by 32 feet 6 inches.
Frame openings	...	...	1 foot 10 inches.
Aft peak	...	...	27 tons.
Forward peak	...	...	12 tons.
Engine room tank	...	...	10 tons.

Accommodation:—

Cabins: Double	...	...	12
Fourth-berth	...	...	8
Total	...	...	20

Fully armed natives troops, 252.

Consumption per average voyage:—

Of wood: 8,500 cubic feet. Allowing 80 cubic feet to ton, 106.25 tons.

Calorific value 7,000 B.T.U. per pound.

Of coal: With calorific value of 10,000 B.T.U. per pound 73.44 tons.

Of oil: With calorific value of 18,000 B.T.U. per pound 41.3 tons.

APPENDIX II

CAPTAINS

Commander G. A. C. Sharp, R.N. (Retd.)	...	...	1927-1933
Lieut.-Commander L. P. Lane, D.S.O., R.N. (Retd.)	...	...	1933-1934
Mr. W. G. Sawtell	...	...	1935-1936
Commander G. H. S. Sullivan, R.N. (Retd.)	...	...	1937-1939
Lieutenant P. Vaughan, R.N.R.	...	...	1937-1939
Mr. D. Boyd	...	...	1939-1940
Mr. R. E. F. Parsons	...	...	1940-1942
Mr. E. W. Jones	...	...	1943-1946

CHIEF ENGINEERS

L. G. Holliday	...	...	...	1927-1931
R. Buir	...	...	...	1931-1934
H. B. Scott	...	...	...	1934-1936
E. B. Buss	...	...	...	1936-1938
G. Crawford	...	...	...	1938-1940
G. Barnes	...	...	...	1940-1946

TRIBAL HISTORY & LEGEND

A Note on the Washomvi of
Dar es Salaam

By E. C. Baker

Most of the information contained in the following note was obtained in course of conversation with Mwinyiheri bin Akida, the oldest of the Dar es Salaam residents, who lives at Kisutu which was once a large village but now, through the exigencies of town planning, is no longer included in the "Native Zone."

The Shirazi immigrants from Persia eventually formed settlements at a number of places on the Azanian coast including Dar es Salaam, then known as Mzizima, and Konduchi. There are some ancient Shirazi tombs at Konduchi but the Shirazi village at Mzizima was situated in front of the European Hospital and has now been washed away by the encroaching sea. Mwinyiheri tells me that he was born in that village and he must be almost, if not quite, the only person now living who can remember it.

The Wakamba, on their great southward sweep, invaded Bagamoyo and threatened Mzizima and the story goes that the Shirazi rulers were discussing ways and means of driving them out when one, Muhamed bin Shale, El Hatimi, beached his dhow which was laden with salt (then a valuable commodity) and merchandize. The Shirazi begged him to lend them the cargo in order that they might use it to induce the neighbouring Wazaramu to assist them against the Wakamba. Muhamed consented and handed over the cargo to the Shirazi who, with the help of the Wazaramu, drove out the invaders.

When the fighting was over those Wazaramu who had helped the Shirazi asked them where they could settle and they were given land in the neighbourhood of Mzizima. But the Shirazi could not pay back the merchandise which they had borrowed and used to remunerate the Wazaramu, so, eventually, Muhamed liquidated the debt by marrying Makazija, the daughter of one of the Shirazi leaders. Thus was born the Shirazi/Hatimi clan which took its name, Shomvi or Chomvi from the salt (*chumvi*) brought in Muhamed's dhow.

At Unonio, beyond Konduchi on the Dar es Salaam/Bagamoyo road, ruled Diwan Mgungurugwa bin Abubakr, Mshomvi, who begat twelve children. He had no moveable property to leave to them so he provided for their future by settling them at various places on the coast where they could profit by the royalties paid on ambergris, timber washed up by the sea, and the *mkadi* (*pandanus Kirkii* or screw pine) which grows freely

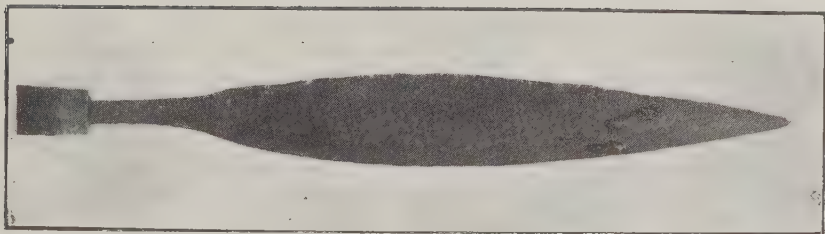
on the seashore and was, and is, valued for its strongly scented flowers which are used by the coastal women for personal decoration or for placing in the boxes in which they store their clothes.

Mgungurugwa's grandson, Mwinyikambi, whose tomb still exists near the explosive go-downs at Magagoni, is said to be the father of the Mzizima Washomvi but died without being enthroned as Diwan. He was the ancestor of Mwinjuma bin Shomvilhaji who ruled as Diwan under the nickname of Kitembe (*kitembe*=*kiambazi*, the wall of a native house, i.e. shelter to all who made use of the house: *kitembe* also means a defect in speech but this is not, or so it is said, the reason why it was given to Mwinjuma).

Kitembe was succeeded by his brother Muhamed bin Shomvilhaji who ruled as Jalala which means the midden—everyone brought their troubles to him and he listened patiently. (Note: The name was first given to me as Zahara but this is incorrect).

Both Kitembe and Jalala were buried near the present Secretariat buildings: that of Diwan Kitembe is the big covered structure.

These tombs, though of local interest, are of no great age. I was told in 1931 that a son of Jalala was then living at Kisutu but Mwinyiheri tells me that he only had one daughter who died about fifty years ago. The mistake probably arose through the practise of alluding to nephews and even grand-nephews as sons.



TYPICAL UNPOISONED ARROW. The protuberances on the head of the arrow are not arrow poison.



TYPICAL POISONED ARROW. Note the barbs and the coating of arrow poison applied behind the barbs (arrow from Upare Mountains).

Tanganyika Arrow Poisons

By W. D. Raymond

AS A RESULT of intermittent study of Tanganyika arrow poisons during the past twelve years, it is now possible to supplement information given in a preliminary note published in *Tanganyika Notes and Records*, 1936, by a more detailed description.

The history of East Africa has been so fragmentary until comparatively modern times that early records of the use of arrow poisons are necessarily scanty. This does not imply that the history of such poisons is less venerable there than elsewhere. Theophrastus (1) (372-287 B.C.) refers to the use of such poisons by the Ethiopians and after 1500 A.D. references to their employment on the East Coast first by Portuguese writers and later by other Europeans became more numerous. Collected studies, as distinct from individual reports, on the arrow poisons of Tanganyika have been made by Lewin (2), Perrot and Vogt (3), and Braun (4). In the present study much additional information has been obtained from Administrative Officers in response to a circular letter issued by the Chief Secretary to the Government, but the main advance has been in the elaboration of suitable laboratory methods for the examination of the poison itself (4a).

As regards the active principle of the commoner type of arrow poison, this has been isolated in the pure form, and ultimate analyses and the preparation of the heptaactylanhydro-derivative show it to be identical with the ouabain isolated by Arnaud in 1888 from Somali arrow poison. New analytical methods introduced enable as little as 0.002 of a milligram of ouabain to be detected, and other tests introduced are sufficient to identify the nature of the active principle present in the three main types of Tanganyika arrow poison. In addition, the actual potency of the poisons has been assayed both by a new colorimetric test, and also by a simplified modification of the classical frog assay employed for cardiac glycosides. By microscopical examination of the particles of vegetable material always present in the poisons themselves, it has been possible with certainty to diagnose the botanical sources of at least the main ingredients employed by the African.

As the methods of manufacture vary from district to district the subject will be considered under the main heads of the botanical source of the principal ingredient, with area sub-headings.

In the consideration of a subject involving tribal names much confusion is caused by differences of nomenclature and spelling. In the present description as far as practicable the nomenclature of Jerrard (5) is followed, but where any doubt exists as to another author's meaning

the original is enclosed in brackets after the revised spelling. At the heading of each area the name of the tribe engaged in the manufacture of poison within the area is added and within each description a brief note of the results of the histological and chemical examination is given.

I.—POISONS DERIVED MAINLY OR ENTIRELY FROM SPECIES OF ACOCANTHERA

The majority of the arrow poisons in use within Tanganyika are derived from one of the three species of *Acocanthera* indigenous there. These species are *Acocanthera longiflora* Stapf., *Acocanthera Friesiorum* Mgf., and *Acocanthera venenata* (Thbg.), G. Don var *typica* Mgf. It has been shown that all these species contain a glycoside closely related to, and probably identical with ouabain.

1. LIWALE AREA (SOUTHERN PROVINCE). TRIBE: MAGINGO

Duttenhofer (7), in 1842, referred to Kilwa poison as obtained from a tribe some thirty days journey away. A specimen of the poison of the Mwera, a tribal group of the Yao living near Lindi, was examined by Lewin (8), in 1893, and found inactive. This sample was described as contained in a small phial (Flaschen). Later, material used by the Pogoro of the Ulanga plain, said to have been prepared from a species of *Acocanthera*, was examined by Brieger and Diesselhorst (9), who isolated from it a toxic glycoside. It would appear probable that all these samples had their origin in the manufacturing centres near Liwale.

METHOD OF MANUFACTURE

According to the Assistant District Officer, Liwale (10): "this poison is obtained from what is believed to be a species of *Acocanthera*, native name *uchungu* (=bitter), which grows in one locality on the northern side of the watershed variously named Libungani and Mpapule in the Liwale District. (Map reference G.F.F. F. 6A, 6, 7, 10 and 11). The trees are very dense in one or two areas and it might be considered that the present distribution is due to the seeding of one or a few trees introduced at that spot many years ago. No information can now be obtained as to who introduced it or whence it came. This locality is the only one known in the Southern Province.

The tree itself is unmistakable. The average size is some twenty to thirty feet tall with a circumference at three feet height of two to three feet. The bark appears of a greyish colour. The leaves are some four to five inches long by two inches broad and are lancet shaped. The trees have no apparent maleficence on surrounding vegetation.

The poison is prepared by the following process. A section of the tree is cut and divided into slivers. These are then placed in a pot together with a certain amount of water and boiled until a sticky black mass is produced which can be stored, and smeared on to the arrow

head. The strength of the poison depends on the quantity of water added to a given quantity of slivers and is of an exceedingly bitter flavour.

The poison is well-known among the natives of the Southern area, many of whom come from surrounding districts in order to purchase it. It is also peddled by the makers to other districts at a price of some two shillings for a small phial. The strength will remain unimpaired up to two or three years if protected from sun and rain. The manufacture is not secret and is performed by as many as six or more families living in the areas.

A concoction of average strength will kill a normal man in from half to one hour after being struck. It depends for its success on its being introduced into the blood by a wound. Thus it may be handled; and even drunk—if there are no sores or open wounds—with no more effect than inducing an attack of dysentery. The elephant is considered immune though this may follow from the difficulty experienced in penetrating its hide.

BOTANICAL SOURCE

A specimen of *uchungu* accompanying the above report was identified as *Acocanthera venenata*.

TYPE OF PACKING

Four bulk specimens of poisons received from this area were all packed in the empty shell of a *Strychnos* fruit. A packed specimen is illustrated.

NATIVE ANTIDOTES

The antidote(11) is a plant known in Swahili as *Kikulo* or *Kikuro* (*Fadogia* sp.) and the root, which is said to be carried by the natives using the poison, is ground up against a stone or piece of metal and rubbed on and into the wound. It is considered to be effective even if administration is delayed for a period and is more effective when the wound is in an extremity.

It is an extremely hard wood and it is interesting to note that a species of *Fadogia* has been reported to be in use for the same purpose in Nigeria.

TRADE

Sale of the poison appears to extend in all directions to a radius of about 150 to 200 miles. In the present enquiry trade from this centre has been traced to Kilwa, Tunduru, Rufiji, Lindi, Mikindani, Mahenge, Kiberege and Songea (12).

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

The poison contains about ten per cent of a toxic glycoside which is probably ouabain. Histological examination showed the poison to be prepared in the main from woody portions of a species of *Acocanthera*.

2. MUSOMA AREA (LAKE PROVINCE). TRIBES: IKOMA, NATA

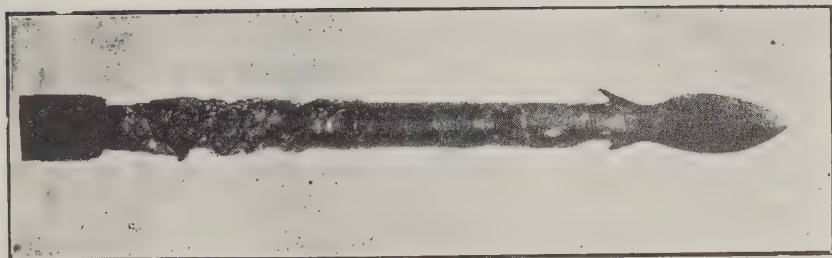
Baumann (13) describes the inhabitants of the island of Ukerewe as employing poisoned arrows in warfare in 1891.

METHOD OF MANUFACTURE

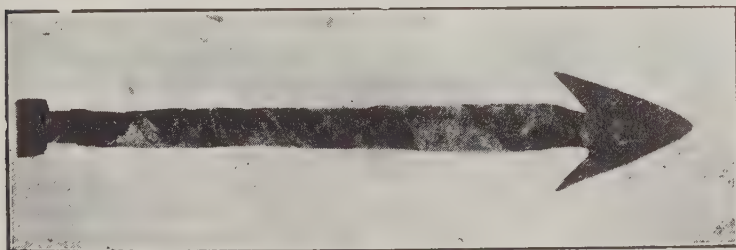
A letter from an African (14) describes the preparation of the poison in the border districts of Viregi and Ukirra (Bukira is a border district about thirty miles distant from the shores of Lake Tanganyika). The poison is prepared from a tree known as *musungu* to the Subi (Wasuba) and grows to a height of 1.0 to 1.3 metres. For the preparation of the poison young trees standing by themselves are preferred, since according to local ideas the leaves falling from the poison tree will prevent the growth of other vegetation and the scarcity of the latter near the tree is a guide to its toxicity. The trees are brought into the house and freed from leaves. The woody portions are cut into small pieces, placed in a clay vessel of about fifteen to twenty litres capacity, covered with cold water and boiled for seven hours. The woody portions are then removed and the dark extract concentrated by evaporation. Finally the thick viscid poison is filled into wooden containers. A container eight centimetres high and six centimetres in diameter sells for one iron hoe, one goat or about one rupee (1s. 6d.). The poison is said to remain unimpaired in its container for several years and is coated on to the arrow head shortly before its expected use. After coating on the arrow it may be covered with material (bast, animal membrane and the like) so that the poison may remain moist and in good condition. Poison which has hardened from storage may be reconditioned by stirring it with water until it assumes a mushy consistency. The largest buyers are said to be the Shashi and Zanaki (Wassanaki).

More recent information (15) concerning the manufacture within this district was obtained in 1934. It was said to be manufactured in the Masai border north-east of Nata and east of Ikorongo from a tree known as *Obosongo* to the Nata. The tree grows to a height of thirty feet and a specimen of wood as employed was three to four inches in diameter. It was said that wood of the tree was cut in small pieces, extracted with water by long boiling over a fire and then concentrated.

In connection with the native name for the tree Hurel, who studied the language of Ukerewe Island (in Lake Victoria) gives *Kuhusa obusungu* as meaning "to poison an arrow" (16).



A



B



C

POISONED ARROWS

A, from Musoma. B, from Arusha, C, from Korogwe.

(B and C show the impression of the leather binding which protects the poison from weathering).

BOTANICAL SOURCE

A specimen of *Obosongo* accompanying the second report quoted above was identified as *Acocanthera Friesiorum*.

TYPE OF PACKING

Three bulk specimens from this area were packed in hollow wooden boxes of varying dimensions.

NATIVE ANTIDOTES

No information has been received.

TRADE

Precise indications (17) of the extent of the area manufacturing arrow poison has not been obtained but it seems that the poison is prepared at several centres near the Kenya border and that the manufacturers at Mbulu (see below) learnt their trade from makers in the Musoma area. The sale of poison from this area seems to compete with the Biharamulo poison to the south beyond Mwanza and with the Loliondo and Mbulu poisons to the east.

In the present survey the sale of Musoma poison was traced to Shinyanga, Ngudu, and Maswa. The District Officer, Maswa, stated in forwarding an arrow that "Chief Ndaturu of Ntusi, who sent them in, says that the poison is obtained from the Ikoma by the Sukuma. The Ikoma have not divulged the secret of the preparation of the poison to the Sukuma, who buy all the poison used and do not make any themselves." Another report from Shinyanga described the Sukuma as obtaining their poison from the Musoma area or the Loliondo area of Masailand. Braun, quoted above, reports the Shashi as sellers of the poison so that it may pass through many hands before reaching the actual user.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

The poison contained eight to sixteen per cent of a toxic glycoside, probably ouabain. Histological examination showed it to have been prepared from the woody portions of a species of *Acocanthera*.

3. MBULU AREA (NORTHERN PROVINCE). TRIBE: BARABAIK (ISSIMIEK)

Acocanthera Friesiorum, known to natives of the district as *argassi* was reported in this district by Margarf (18). The poisons described below under Mbulu, Loliondo and Usambara appear to supply a rather ill-defined area and have been referred to by other writers under other headings. It has not been possible to connect previous descriptions in every case with the classification here adopted.

METHOD OF MANUFACTURE

Precise details have not been obtained. It is said (19) to be extracted from a tree known as *kharghesi* in Ki-iraqw. The tree grows in most places in the Mbulu area but the poison is only extracted by the experts of the Issimiek tribe, a sept of the Tatoga. The Issimiek came into the district some sixty years ago from Maswa and live in the neighbourhood of Dongobesh.

BOTANICAL SOURCE

A specimen collected in connection with the above reports was identified as *Acocanthera Friesiorum*.

TYPE OF PACKING

One bulk specimen received was packed in a wooden box, similar to but smaller than the Musoma packing.

TRADE

The poison is sold to tribesmen living in the Mbulu District and as five shillings was paid for the container full of poison shown in the illustration it appears rather expensive compared with Musoma poison. Little is known regarding the sale of this poison further afield except as noted above under Musoma.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

The poison is similar to the Musoma poison but the histological results suggest that it is prepared from smaller woody twigs. Numerous fine pittings of the vessels were also noted.

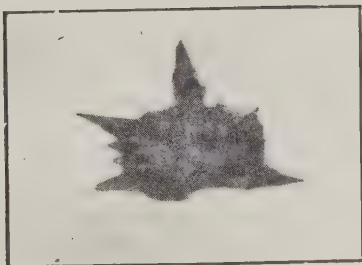
4. LOLIONDO AREA (NORTHERN PROVINCE). TRIBE: SONJO

Lewin (20) examined a sample of Masai poison in 1894 and several writers have referred to the poison of the Masai and Dorobo. According to the present survey these tribes are not the actual manufacturers of poison but obtain their supply from the Kamba (see below) and the Sonjo.

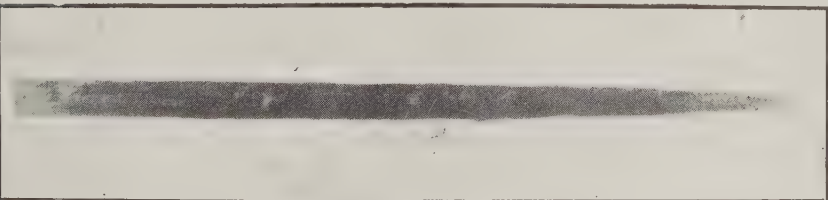
Maguire (21) in his study of the Dorobo found they knew nothing about the manufacture of arrow poison, held it in considerable awe, and have never attempted to make poison of their own. He describes the poison as obtained from the Kamba. The District Officer, Masai (22), reports that the Dorobo do not prepare their poison to the extent that they formerly did but obtain their supply from the Sonjo and the Kamba. The Assistant District Officer, Loliondo (23), supports this report that poison is manufactured by the Sonjo.

METHOD OF MANUFACTURE

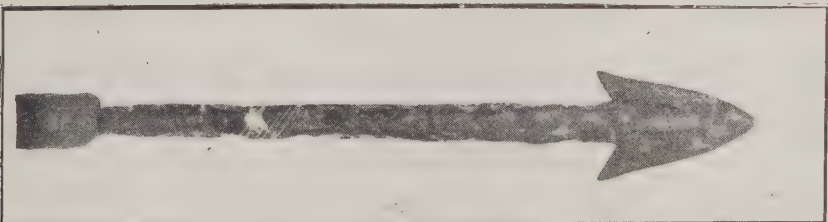
Under the heading Arusha, Braun (24) describes the preparation of poison by the Dorobo but this may refer to methods used by the Sonjo.



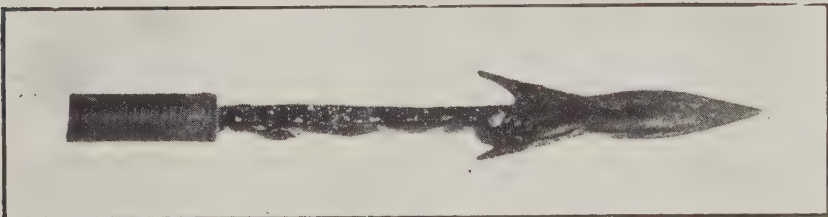
Prickly seed of TRIBULUS TERRESTRIS L. found coated with poison derived from a species of Acocanthera (Attempted homicide case) enlarged x 2½.



IKISU POISONED ARROW (MUSOMA)
All wood. Nat. size.



A



B

POISONED ARROWS

A, from Moshi. B, from Liwale.

The following details are given. A single man goes some distance into the bush where he breaks up the roots and branches of a plant variously known as *ol morijoi*, *adug*, or *murju*, into pieces of about five centimetres long. These are then placed in an ordinary clay pot which is filled with river water. It is boiled for several hours, loss by evaporation being replaced from time to time. Later the woody portions are removed and the dark brown liquid is concentrated to a sticky mass. Women must not be present during the manufacture and only bring supplies of food to within hearing distance of the worker.

The poison is tested out by shooting an antelope. If urine and droppings are found on its track then the poison is too weak. A tortoise wounded on the foot should only make five or six steps.

A later report states that the poison is prepared by boiling a piece of branch, complete with bark, of the tree variously named *moruta* or *ol morijoi* in water until a gruel of the consistency of porridge is obtained. The mass is placed on a stone and pounded with another until it becomes hard. The poison is now ready for use and is smeared on to the arrow after softening with water.

BOTANICAL SOURCE

Acocanthera sp. probably *A. Friesiorum*.

TYPE OF PACKING

No packed samples received in the present survey. Under Arusha, Braun describes the poison as packed in wooden pots (*holztiegel*), leather containers or rolled out by hands covered with wood ashes to a cigar shaped mass which is then covered by binding material.

Maguire refers to the poison of the Dorobo as often carried in the heel of the quiver. Prepared arrows of the Masai and Dorobo are frequently covered with a strip of soft hide—often that of reedbuck or impala—worked to a state of pliability resembling that of chamois leather.

Poison packed in leaves is referred to under the Kamba, and the *holztiegel* of Braun may refer to the Mbulu or Musoma type of packing.

NATIVE ANTIDOTES

Merker (25) describes the Masai as urinating in the wound of a warrior struck by a poisoned arrow.

TRADE

The Masai above the Rift Wall obtain their poison to a large extent from the Sonjo. The Arusha and Meru obtain their poison from the Kamba and Dorobo and also from Sonjo who travel about trading in *Magadi* salt (this is probably an alkaline carbonate, a delicacy appreciated by the Arusha and Meru (26)).

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

A poisoned arrow said to have been prepared from *ol morijoi* was obtained from a Ndorobo of Monduli, who purchased it from a Sonjo and believed it to have been poisoned with poison prepared in a Sonjo village in the Loliondo area. For transmission to the laboratory this poisoned arrow had been wrapped in paper.

Examination of the poison scraped from this arrow showed 8.4 per cent of a toxic glycoside which was probably mainly ouabain. The colorimetric assay was confirmed by approximate physiological assay on frogs.

Histological examination of the residue showed it to consist mainly of wood and bark of *Acocanthera*. Both types of calcium oxalate crystals were present. Numerous small pitting of the wood vessels were noted. Some foreign vegetable material and a smaller amount of animal debris was present. Paper fibres (probably from packing) and sand were also present.

It thus appears that the poison resembles the Mbulu poison and is prepared from a larger proportion of twigs than in Musoma and Liwale preparations.

5. USAMBARA AREA (TANGA PROVINCE). TRIBE: KAMBA

It appears that the Kamba, a rather widely diffused tribe, prepare their poison in several centres and the description given under Usambara and Bagamoyo will refer to their methods generally. Although not separately listed there is evidence to suggest that a centre for the manufacture of Kamba arrow poison exists in the neighbourhood of Kilosa as well as the two centres here described. Probably they also prepare poison in Kenya but this is outside the present survey which is limited to Tanganyika.

Pachkis (27), in 1892, isolated crystalline material from Kamba poison. Lewin (28), in 1893, examined a specimen of Kamba poison, but was unable to isolate any crystalline material. Brieger examined the poison from the same tribe in 1899, and isolated crystals for which he proposed the formula C₂₉H₄₆O₁₉ (29). (Formula of anhydrous ouabain C₂₉H₄₄O₁₂.)

According to Hildebrandt (30) the wood from which the poison is prepared is sold to the Kamba. Braun gives good reasons for supposing that the Shambaa (Schambala) poison is not made from that tribe but obtained from the Kamba.

METHOD OF MANUFACTURE

Two descriptions are given by Braun (31). According to one, the leaves, roots and branches of the tree *muchungwe* (*Acocanthera* sp.) are boiled together for the preparation of the poison. This tree is reported

as flourishing behind Kwao on the way to Mlale and several of the plants were observed to have been cut down.

According to another description by an African the twigs of the *sesenekaziga* (*Acocanthera* sp.) tree are cut into small pieces and boiled vigorously with water, stirring the while. When the bark begins to separate from the wood a second pot is taken and the liquid decanted. Fresh twigs are added and the whole is reboiled. Finally this extract is poured off and the combined extracts evaporated to a thick mass. The prepared poison is packed in strippings from the stem of the banana. The pots used for the preparation of the poison are kept especially for that purpose. Leaves and fruit of the *sesenekaziga* tree are not used for the preparation of the poison although if eaten they will cause death. The thicker woody portions of the tree can be used but they are less easily extracted.

The District Officer, Masai (32), stated that the poison was prepared by the Kamba from the root and bark of a species of *Acocanthera* which are cut up and boiled. Usually after four boilings and strainings a thick black paste is formed which is the arrow poison. The same piece of material may be used up to three times for the preparation of poison before its toxic properties are exhausted but the third preparation will naturally be weakest.

BOTANICAL SOURCE

A specimen collected by the writer in this area and said to be used for the preparation of Kamba poison was identified as *Acocanthera longiflora*.

TYPE OF PACKING

The common Kamba packing is a cigar-shaped mass wrapped in strippings from the stem of a banana.

NATIVE ANTIDOTES

The charcoal of *Agauria salicifolia* or perhaps the plant itself was vaguely reported as an antidote for arrow poisoning within this area. The plant is certainly toxic to stock and was investigated by the writer. A poisonous glycoside was isolated from the leaves of the plant but was not obtained in a crystalline condition.

TRADE

The poison sells (34) over a wide area. It is sold to the Masai and Dorobo and travels to Kilewo, Kahe, Himo, Kilosa and Dodoma. The Sambaa are said to obtain their poison from the Kamba of Buiti, a sub-chiefdom of Mlola. Arrows purchased by the writer in Dar es Salaam were said to be poisoned with Kamba poison. One packet of poison as illustrated sells for about fifty cents.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

A bulk specimen of Kamba poison from Dodoma contained fourteen percent of toxic glycoside which appeared to be ouabain. Histological examination revealed portions of the wood and bark of a species of *Acocanthera*.

6. BAGAMOYO AREA (EASTERN PROVINCE). TRIBE: KAMBA

Stuhlmann described the poison as prepared from two plants known as *mssageti* and *kuliga* or *kulega*.

METHOD OF MANUFACTURE

In the present survey (35) two descriptions have been obtained of the preparation of arrow poison in this district. Both refer to secrecy that surrounds the preparation and both descriptions refer to the use of a species of *Acocanthera* known locally as *msunguti* (cf. *uchungu*, bitterness; *mti*, tree) together with other plants. One of the descriptions gave native names and specimens for the supplementary plants but the latter were too poor for identification. One may be a poisonous species of *Dioscorea*.

The wood of the tree was said to be cut into small pieces and boiled with water for two complete days. After removing the wood the extract is concentrated to the consistency of putty. The potency of the finished poison is tested by making an incision in the skin of a chicken and then applying the poison. If it is dead after the second jump it is first grade poison. Another test for the efficiency of the poison is to cut a vein in the arm and let a stream of blood flow. The poison is applied on the arm below the cut and if the poison is sufficiently active for use the blood is said to run back up the arm.

BOTANICAL SOURCE

An unflowering specimen was identified as *Acocanthera longiflora*

TYPE OF PACKING

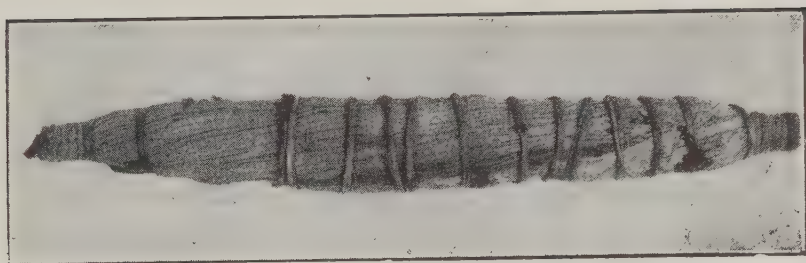
Cigar shaped packages which vary in length and are covered with dried foliage as illustrated under the Kamba poison obtained from Dodoma.

TRADE

The poison is said to sell over a wide area reaching to Kilosa.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

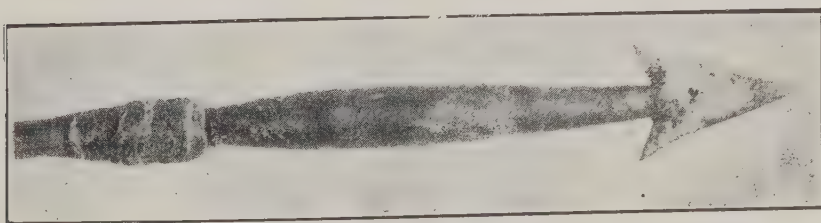
Chemical examination (confirmed by approximate physiological assay) showed the poison to contain 5.2 per cent of ouabain. The clarified extract rotated the plane of polarization to the right. The histological examination showed the presence of little material that could be definitely identified as *Acocanthera* but much foreign vegetable matter. Some of the latter might have been derived from *Dioscorea*.



A



B



C

- A, *Arrow poison container of the Kamba tribe (obtained from Dodoma)*
- B, *Poisoned arrows from Dodoma (note fibres to facilitate adherence of the poison).*
- C, *Pare poisoned arrow.*

The low assay and the presence of dextrorotatory material suggests the presence of material other than *Acocanthera* and this was confirmed by the histological examination. The active principle seems nevertheless to have been derived from *Acocanthera* and the sample examined may have represented some of the lower grade material to which reference is made in the native reports.

7. BUKOBA AREA (LAKE PROVINCE). TRIBE UNCERTAIN

The natives of this area are reticent regarding their poisons and the area where it is made is rather inaccessible. Braun collected vague indications regarding the preparation of poison within this area and mentions a report that it is prepared from wood, lizards, snakes and such like. He mentions the native name *bumara* for the poison.

METHOD OF MANUFACTURE

The District Officer, Biharamulo (36), describes the poison *bumara* as obtained from the *misegwe* tree in the Karagwe Chiefdom of Bukoba. No exact details of preparation are given. "The gall bladder of a crocodile mixed with *bumara* adds to the strength of the poison and fetches a good price if a native is lucky enough to kill a crocodile. Red and blue lizards and the stomach of a puff adder and a snake which, from the description, appears to be a mamba are also added as ingredients when obtainable. The arrow poison is very virulent and is used for all types of game, death occurring within five minutes to half an hour (37)."

BOTANICAL SOURCE

No specimens from the tree named were received but histological examination of the poison suggests *Acocanthera*.

METHOD OF PACKING

No bulk sample was received.

NATIVE ANTIDOTES

The following (38) are claimed to nullify the effect of the poison if promptly applied: Couch grass or red sweet potatoes chewed and then applied to the wound, which is sucked. Wild fig leaves are also used in a similar manner.

The poison is said to be so astringent that the lips of the person who sucks an arrow poison wound will crack.

TRADE

The poison used by all Ha (39) in the Kasulu and Kibondo districts and the arrow poison used in the Biharamulo District are probably from the Karagwe District.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

Chemical examination showed the poison obtained from Biharamulo to contain 7.4 per cent of ouabain, a result confirmed by approximate pharmacological work. Material isolated by the usual chemical method of purification was dextrorotatory but after purification by passage through a water immiscible solvent laevorotatory material was obtained.

Histological examination of the residue was found to consist of—

- (a) Relatively large and in part microscopic particles of material not derived from *Acocanthera*; perhaps from some cane or bamboo.
- (b) Animal tissue.
- (c) Fine material derived from a species of *Acocanthera*.
- (d) Sand and other foreign material.

II.—ARROW POISONS DERIVED MAINLY OR ENTIRELY FROM SPECIES OF STROPHANTHUS

Several species of *Strophanthus* are known to occur in Tanganyika but the only one employed for the preparation of arrow poison appears to be *Strophanthus eminii* Asch. et Pax. This species has been examined in recent years in Europe and the seeds contain a cardiac glycoside which differs slightly from the official glycoside strophanthin of the British Pharmacopoea.

SINGIDA AREA. TRIBE: TINDIGA

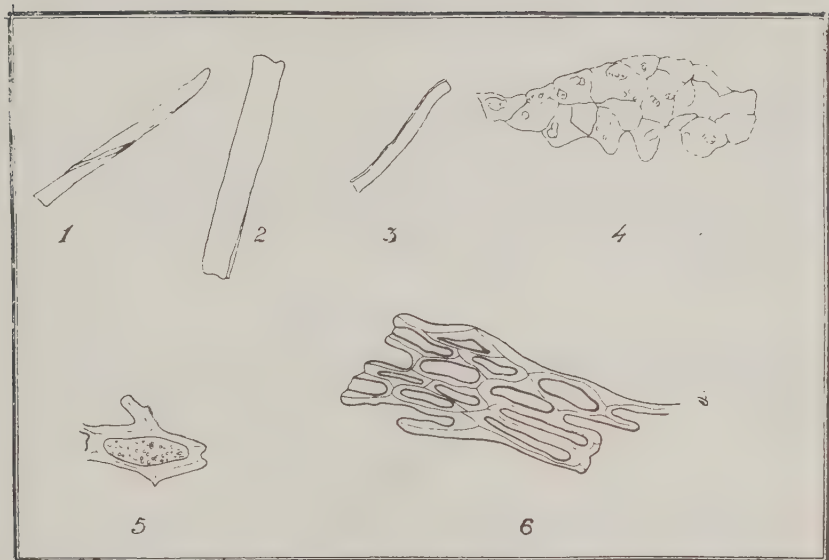
Stuhlmann (40) describing Emin Pasha's journey through Africa (1894), gives a description of the arrow poison used by tribes near Tabora (Nyamwesi tribe) and gives an interesting account of its manufacture.

"The arrow poison is prepared by the expert far from the village and in full secrecy of the forest. He cooks the pounded root bark of *bungo-bungo* and *muelle-muelle* together and adds lizards, snakes' heads, snakes' tongues and other dismal ingredients thereto. The rising vapour is very deadly. After some time the pot is removed from the fire and the poison which now forms a dark pulpy mass, is allowed to cool overnight."

Both Braun and the present writer identify *muelle-muelle* as *Strophanthus eminii* and from the present survey it seems probable that *bungo-bungo* is *murugurungu*, a plant mentioned below.

METHOD OF MANUFACTURE

Two descriptions (41) have been collected in the present survey and both these and Emin Pasha's description bear certain resemblances but the laboratory examination leaves no doubt that the seeds of *Strophanthus* are the main ingredient.



FRAGMENTS ISOLATED FROM SINGIDA ARROW POISON.

(Drawings by R. Cayzer)

-
- 1, 2, 3. Lignified hairs (1, 2 $\times$ 400) (3 $\times$ 200).
 4. Cells of the aleurone layer ($\times$ 200).
 5. Portion of seed coat showing cell contents ($\times$ 200).
 6. Portion of seed coat ($\times$ 200).
-

All the above were also found in suitable preparations
of the seed of *Strophanthus eminii*.

According to one account the boiled sap from *Strophanthus eminii* is mixed with liquid extracts from a species of *Adenium* and other material.

The second account was obtained from a poison expert and the plant *panju* (*Adenium* sp.) was given as the principal ingredient. The leaves and smaller stalks of this plant, which must be fresh, are removed and the thicker parts of the stem are cut into small pieces and placed in a calabash of water. The water is boiled for about twelve hours and some pieces of the shrub *murugurungu* (this has not been identified but may be a specie of *Fagara*) are then added with the object of assisting coagulation. The solid matter is removed and the remaining liquid, with the occasional addition of water, kept at the boil until only a thick glutinous residue remains. This residue is removed, moulded and cut into the desired convenient shape on a stone and is ready for use as poison. The whole boiling operation takes about twenty-four hours and the yield of poison is only a few ounces from a very large calabash of the shrub.

BOTANICAL SOURCE

The main ingredient is the seeds of *Strophanthus eminii* (see below under laboratory examination), but in view of the native descriptions the use of *Adenium* as well may be suspected.

TRADE

The Tindiga are a small remnant of nomadic hunters wandering in the extreme northern area of the Singida District. They speak a "click" language and refer to themselves as the Hadzaupe. Nothing is known regarding the extent of the trade in arrow poison but ten arrows poisoned with this poison sell for about one shilling. A bulk sample received in connection with the reports on the manufacture was loose and in no container. Game killed with the poison is described as edible, the tainted flesh around the wound only being discarded.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

This is based on one bulk specimen of poison and four poisoned arrows collected at random in the district.

Histological examinations showed the insoluble residue to consist almost entirely of fragments from the seeds of a species of *Strophanthus*.

Chemical examination (of the bulk specimen only) showed the glycoside present to be strophanthin and probably strophanthin-e (that is, derived from *S. eminii*).

Assay by the meta-dinitrobenzene reaction showed the physiological equivalent of 3.0 per cent of crystalline ouabain and the approximate physiological assay suggested about two to three per cent.

This poison is thus not so active as the *Acocanthera* poisons discussed in the previous section.

III.—ARROW POISONS DERIVED MAINLY FROM SPECIES OF URGINEA

The sea onion or squill was used as medicine by the Egyptians and Romans but the use of *Urginea* for the preparation of arrow poison is, as far as the writer is aware, new. It is all the more remarkable that in a single territory all the vegetable cardiac poisons there known to modern science should be utilized by tribes for the preparation of arrow poison. It supposes a degree of accuracy of observation not usually attributed to backward races.

UFIPA AREA (WESTERN PROVINCE). TRIBE: NYIKA

METHOD OF MANUFACTURE

This differs from previous descriptions in that the arrow poison is prepared a small quantity at a time when required. The bulb, Sungwe (42) (*Urginea* sp.), is pounded between two stones and the resulting fibres are dried in the sun. The mass is then pounded again, water added to the correct consistency and the paste formed is coated round the arrow which is dried in the sun. The mixture with water is stirred during the preparation of the poison, sometimes by hand and sometimes by stone. The poison is prepared by men only and often its preparation causes an irritant rash on the hands but if the hands are washed immediately the rash disappears. Sometimes the juice of a species of wild Aloe is admixed with the poison.

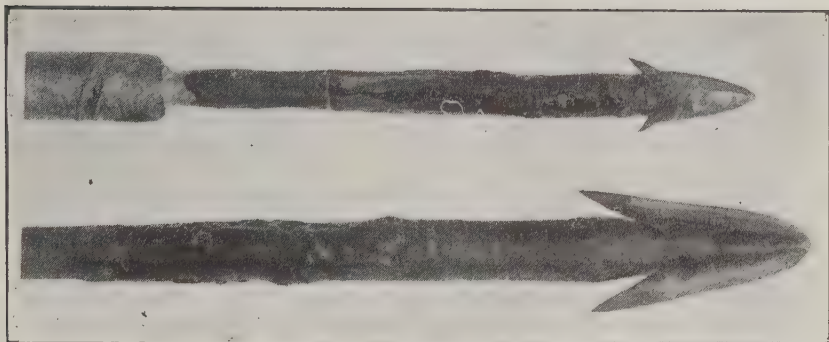
BOTANICAL SOURCE

The bulb *Sungwe* was cultivated at Dar es Salaam and specimens collected were identified as *Urginea* sp. near *U. sanguinea* Schinz. There was nothing exactly like it in the Amani Herbarium.

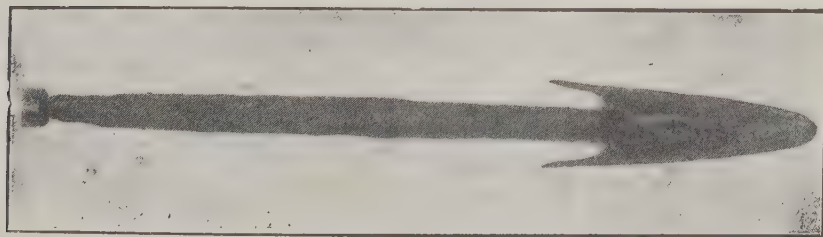
The prepared arrows or the raw bulb is traded.

NATIVE ANTIDOTES

Humans wounded with an arrow to the extent of about an inch will recover if they remove the arrow and mix soda or wood ash with hot water and apply it to the wound. If the poison remains in the body a human will die in about three hours. Warthogs are reputed to be the toughest animal to kill. If hit in the shoulder at noon they will be found dead at sundown. If hit in the loins they will run for about half a mile, but if hit in the stomach they will not die.



Poisoned arrows from Musoma.



Ufipa poisoned arrow

TRADE

The poison is also known as *ulembe* and the bulbs are found below the Rukwa escarpment towards Chunya. They are brought to Ufipa by the Nyika and sold at the rate of two bulbs for fifty cents, three bulbs for one arrow or five bulbs for one poisoned arrow. The poison is alleged to be in use by the Nyika and Safwa tribes who stretch in a line roughly southwards from the Ufipa Plateau, Mbeya, Old Fife in Northern Rhodesia to the Karonga District in Nyasaland.

SUMMARY OF THE RESULTS OF LABORATORY EXAMINATION

The bulbs and poison appear to contain a toxic cardiac glycoside which is probably closely related in structure to the glycosides isolated by Stoll from Squill bulb. By approximate physiological assay on frogs the poison appears to contain the equivalent of about one per cent of crystalline ouabain. The history of the bulb and poison resemble that of the official *Urginea* bulb.

IV.—POISONS DERIVED FROM BOTANICAL SOURCES OTHER THAN THOSE DESCRIBED UNDER SECTIONS I, II and III ABOVE.

Brieger (43) examined a sample of poison in use by the Gogo which he stated was prepared from a species of *Euphorbia*, and an unknown tree. *Euphorbia* latex alone (and Brieger stated that the poison was from a candelabra *Euphorbia*) is unlikely from what has been described of its properties (43a) to be suitable for the preparation of an active arrow poison. The arrow poison was furthermore described as in use by the Ufime and probably the poison was derived from the Mbulu District. The character of this poison has been described under *Acocanthera* and the function of the *Euphorbia* would be as a supplement to the main toxic principle.

There are reasons for supposing that members of the Euphorbiaceae are sometimes so employed and have a reputation for increasing the toxicity of the *Acocanthera* arrow poison. As the action of the *Euphorbia* seems to be local it may act by causing more rapid absorption of the cardiac glycoside of the *Acocanthera*. *Sapium madagascariense* (Euphorbiaceae) is a plant that has a high local reputation as a supplementary substance for addition to enhance the toxicity of arrow poison (44).

The poison described by Krause (45) as prepared from *Adenium* and used by the Tindiga has already been dealt with in Section II above.

The Nyika (46) are said to use a second arrow poison in addition to the *Urginea* poison. It is said to be prepared from a tuber, grown at Dar es Salaam and identified as *Dioscorea triphylla* var *Dumetorum* (Pax) R. Knuth. The tubers are said to be cut, pulped, dried and then mixed with water and the seeds of the *Pondo* (botanical name unknown) flower. No specimen of this poison has been examined.

The above sections cover almost the whole area of Tanganyika. In the present study some forty poisoned arrows from various parts of the Territory have been received. Although the exact origin of the arrow poison on all these arrows is not known there was nothing in the results of the laboratory examination of these arrows to suggest that any arrow poison, other than that described above, is in use.

All except six of the poisoned arrows collected in the above survey were shown by laboratory examination to be derived from *Acocanthera*. Of the remaining six, four were derived from *Strophanthus* seed, one from *Urginea* bulb, and one probably from *Strophanthus*.

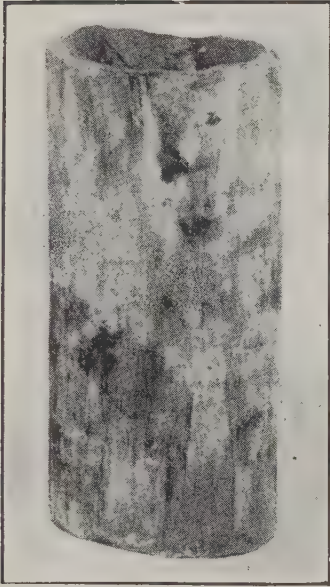
In addition to the arrow poisons collected in the survey, one hundred and thirty-four poisoned arrows have been received in my laboratory in the past seven years, submitted mainly as exhibits in Court cases. With a few exceptions all the arrows found to carry poison were derived from *Acocanthera* sources and the exceptions were found to be prepared from *Strophanthus*.

Two of the arrows received were all wooden and a few were wooden arrows with a simple triangular blade let into the wood point. More commonly the iron part of the arrow is three to five inches long, and the Ufipa arrow had an iron head eight inches long with the iron behind the head spirally twisted to facilitate the adherence of the poison. Elsewhere the iron behind the arrow barbs may be nicked to facilitate adherence of the poison. Quite commonly the iron is smooth but covered with vegetable fibres wrapped round on which the sticky poison attaches itself.

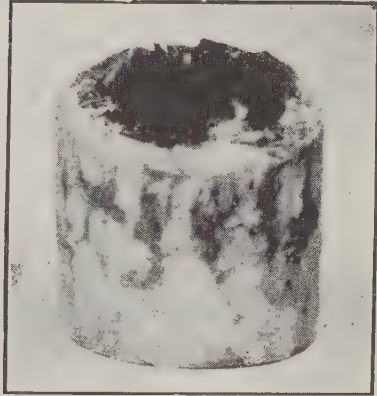
In conclusion I wish to express thanks to Administrative Officers and others who have so kindly collected specimens and furnished information as to source and manufacture, to Mr. R. Cayzer, for assistance in the histological work, and to Mr. P. G. Greenway, for the identification of botanical specimens.

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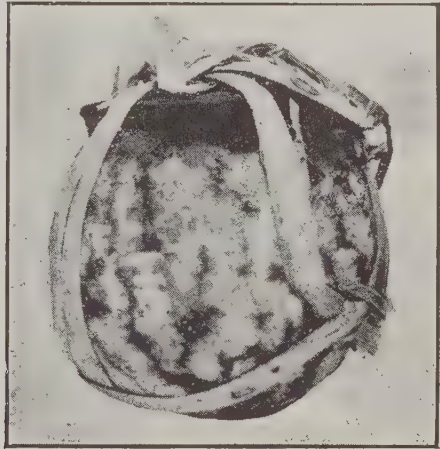
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A



B



C

ARROW POISON CONTAINERS. (*Slightly reduced*).

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B, Mbulu.

C, Liwale.

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TRIBAL HISTORY & LEGEND

Notes on the Waikizu and Wasizaki
of Musoma*By E. C. Baker*

In the region of Kanadi, which is in Sukumaland, the people were so rich in cattle that they could not make use of the daily yield of milk and were in the habit of throwing the surplus into the river which flowed through their country. But this wastefulness was the cause of their downfall, for the river flowed into the Masai country and the Masai, wondering to see the milky water, followed the river bed until they came to Kanadi. They saw the prosperity of the people and the greatness of their herds and, thereafter, they raided them so continuously that the dwellers in Kanadi fled their country and were dispersed.

Among those who left Kanadi were two women, Nyakinwa, who was the elder, and Nyambubi, and they wandered together until they came to Sizaki and there, in the Changugi Hills, Nyakinwa, who was a raindoctor, deposited the Imbura (rain) stones which remain there to this day. These Imbura stones are the medium of communication between humans and the supernatural beings; they are produced in times of crisis and offerings are made through them to the Gods. After leaving the stones at Changugi the two women went on until they came to Chamuliho where they met a man of the Msarara tribe, a hunter by profession whose name was Samongo. After that Nyakinwa and Samongo lived together at Chamuliho and no further mention is made of Nyambubi.

Water was very scarce round Chamuliho and the carrying of it arduous but Nyakinwa prayed to her ghosts and always found plenty in the clefts and crannies of the rocks near their dwelling place and so she was able to carry it home without the discomfort of a long and hot journey. Samongo noticed the short time it took her to fetch the water and tried to discover the source of her supply but, though he questioned her, she refused to tell him.

After a time the two quarrelled as to who was the ruler and owner of the land. Samongo said that he must be the chief for it was he who had found and adopted Nyakinwa but Nyakinwa said no; it was she who had given shelter to Samongo. One night, while Samongo was out hunting, hyaenas howled round Nyakinwa's hut until dawn and rats destroyed the skins which she used as a covering. But she guessed that this was Samongo's doing and next morning she retaliated by bringing a number of lion and buffalo which she shut in their compound. Then she made rain which drenched Samongo and made him shiver so that he ran home for shelter, only to find that he could not enter his compound which

was full of wild beasts. He called to Nyakinwa and asked her what he should do and she calmly told him to come into the kraal by the usual path. He pointed out that the place was full of lion and buffalo which prevented him from entering his own hut but she replied that they were her cattle and that she had brought them into the compound in order to milk them. At last Samongo begged her to come out and guide him and she came out to him and covered his face, for he was terror-stricken, and led him into the hut. When they had settled down she again told him that the beasts were her cattle and that she milked them and, when Samongo reminded her that she had arrived from Kanadi empty-handed, she said that she had sent her flocks and herds on ahead of her. As a last resource, Samongo challenged her to milk her so-called cattle and she went out and did so and brought him the milk.

Next morning Nyakinwa drove the beasts from the compound to enable Samongo to go out and hunt but she brought them back before he returned in the evening and left him outside until he begged her to lead him into the kraal. When she had brought him safely in she went out and milked the buffalo and drank their milk.

Samongo complained bitterly at having all these wild beasts about the place but Nyakinwa retorted that if he was afraid of the animals in the compound she, and not he, must be the ruler of the country. Samongo made a last effort to maintain his argument and pointed out that he must be the ruler of the land as he was living there when Nyakinwa arrived but she said that if he was indeed the overlord he should prove the fact by killing a bushbuck and floating the skin on the water of Bunuri pool, which lay in the Chamuliho plains, until the skin was dry. If, she said, he could do his she would say no more but would submit to his authority. Samongo agreed and killed a bushbuck but when he spread the skin on the surface of the water it sank. Then Nyakinwa took a green skin and floated it on the surface of the pool until it was dry. And thus was female rule established in the land of Ikizu.

The rulers of Ikizu, who based their claim to the chieftdom on their powers of making rain through the agency of the rain stones which still lay at Changugi, are said to have been as follows:—

1. Nyakinwa, a female.
2. Nyekono, a female.
3. Nyakazenzeri, a female.
4. Hoka, a female.
5. Guya, a female.
6. Kesozora, female.
7. Gibwege, a male.
8. Mwesa, a male.
9. Nyakinwa, a female.
10. Matutu or Katutu, a male.
11. Makongoro, the present Chief, a male,
was not a rainmaker when he first became chief.

Kesozora, the sixth rainmaker, always carried the rain medicine in a wallet tied at her waist, but Gibwege succeeded in stealing it and so usurped the Ikizu Chieftdom. He was the first male rainmaker and on his death was succeeded by his son Mwesa. The latter was strangled by Nyakinwa, sister of Gibwege, who became Chief and so re-established female rule. On her accession Katutu, the son of Mwesa, wisely fled to Maswa where he practised his magic and prevented the rain from falling in Ikizu. The prolonged drought made the Waikizu discontented with Nyakinwa and eventually they recalled Katutu who, after taking the precaution of drowning Nyakinwa and her son Gambamara, became chief of the Waikizu and held the position for a number of years.

Katutu was an impetuous, temperamental and volatile old man when I knew him and one would not imagine that he could have maintained his position had it not been for fact that the rainstones were in his possession. He destroyed all harmony in his village by showing a marked predilection now for this son and now for that and always promising the favourite of the moment that he would succeed to the chieftdom on his (Katutu's) death. The exception was the eldest son Makongoro who was a man of strong character and showed his individuality by going off to Uganda where he became a successful trader and a staunch Muslim. About the year 1924 he returned to his father's kraal, a wealthy man by Ikizu standards, and, though always somewhat reserved and aloof, treated his father with due deference while the other sons showed an entire lack of respect and, in fact, treated Katutu abominably.

In 1925, Katutu was sued civilly by his brother Kitabuka and, the issues being extremely involved and both parties refusing absolutely to come to any agreement, the two decided to take the tribal oath. Seven spears and seven arrows were set in the ground about three feet apart, four on one side and three on the other, and a cattle reim was laid across the intervening space. Each of the parties strode over the reim calling on his ghosts to witness his willingness to die if he was not speaking the truth. Sure enough Katutu sickened after taking the oath and died some two or three months later, his death being due, so all considered, to his having committed perjury at the tribal ordeal.

Then, to everyone's surprise, it was discovered that Katutu had nominated his eldest son, Makongoro, as his successor.

So Makongoro succeeded his father but, though he was Chief, he had not the rainstones, which had passed through Katutu's daughter to his grandson, Webiro Kisome, and, without them, he had not the magico-religious powers necessary to consolidate his position among the Waikizu; he had no power to make rain and might, in any time of crisis, become the victim of his fickle and priest-ridden subjects. But again fortune favoured him; Webiro died, the rainstones came into his possession and he became both priest and king. Katutu's choice has proved a wise one, for Makongoro overcame the antagonism of his brothers, ignored the undying hatred of his uncle Kitabuka and has proved a wise, firm and popular chief.

But one thing still worried Makongoro: the rainstones were in the Changugi hills in Sizaki which was not under his jurisdiction but in Ushashi, the ruler of which was a Msukuma named Ruhaga. It was inconvenient and rather degrading to have to perform one's priestly duties in another chief's country; moreover, if serious friction occurred the holy places might be in danger of pollution.

The Waikizu and the Wasizaki are said to be one people and to have identical customs but there was at that time, and may be still, a long-standing dispute as to which arrived first in the country. The Waikizu said that Nyakinwa deposited the rainstones at Changugi and that as she was their tribal mother the Sizaki country must belong to them while the Wasizaki retorted, with some reason, that as the Chief of the Waikizu could only be invested with the Kibangwa, the insignia of his priestly office, by the people of Changugi, the Wasizaki must have been established there when Nyakinwa passed through and that Makongoro could have no claim to their country. They offered to invest him with the Kibangwa in accordance with past custom but Makongoro, proud and uncompromising, would have none of it and pressed his claim to the country.

Nok the Sizaki or, as they are now called, the Ushashi Chiefs, are uncircumcised Wasukuma, ruling over a people in whose lives circumcision plays a part of major importance, but the Wasizaki, who were few in number, accepted the Wasukuma rulers because their magical powers enabled them to ensure an ever-plentiful supply of fish. When Makongoro claimed the country, a number of the Wasizaki were discontented with the Sukuma rule but the tribe, or clan, was always small and most of the malcontents had moved over into Ikizu, their place being taken by Wazanaki who had moved over their tribal boundary into Ushashi and were perfectly happy there. Ruhaga, said to be the eighth Chief of Ushashi, was as indignant as Makongoro was persistent but the issue was decided by the Wasizaki themselves. So many Wasizaki had moved into Ikizu that there was no one left in their country to vote for Makongoro and so all idea of an amalgamation of the two areas came to an end. It must, however, be admitted that had all the Wasizaki been living in Ushashi and so entitled to vote, they would, almost certainly, have been too few to form a majority though they might have made themselves sufficiently unpleasant to have gained the Changugi Hills for Ikizu.

Land Tenure in Bukuria *

By H. Cory

In the first part of the following article I have tried to show the original tribal organisation, the general history and the pre-European land tenure of Bukuria by taking an example of one area, namely, Utimbaru.

ORGANIZATION

Utimbaru, one of the chiefdoms of Bukuria in the Musoma District, is divided into five villages (*gunguli*) each one of which is inhabited by one clan (*kizaku*). The common totem of all Utimbaru is the zebra. Kibasuka, one of the *gunguli*, and the area in which the present study was made, is inhabited by the Bahiri Mwita clan. During the last forty years members of other clans have immigrated but the greater majority of the inhabitants are still Bahiri Mwita. The Bahiri Mwita clan is divided into six sub-clans (*amagiha*), each one of which inhabits a defined area called an *omogei*. Kibasuka, like any other *gunguli* in Bukuria, has its definite boundaries demarcated by streams, rocks, valley bottoms and hills; the *omogei* have usually the same type of boundary. The first arrivals in the country settled down in a particular area. Their children, when they became grown up, looked for good places to settle in and so the family spread out until it met people who came from the opposite direction and who were the children or descendants of another early pioneer. The next best natural obstacle of the type mentioned above became the boundary between the families. The boundaries in parts of the country which were uninhabited were agreed upon much later, or an agreement was never made; and these areas which now become populated give cause to frequent boundary disputes.

If a single family left its domicile and settled in another *omogei* or even in another *gunguli* the connection with its place of origin was not completely interrupted. On the occasion of marriage, death or initiation of the children the distant living relatives were informed and it was their duty to come and to participate in the customary ceremonies. All family members, living near or distant, were obliged to help in the payment of common fines or in the payment of compensation in murder cases. The sub-clan head or the clan head remained their arbitrators in disputes amongst family members.

The members of the sub-clan (*igiha*) lived together in the *oruberi*. This was the settlement in each *omogei*. The family members built their homesteads very close to each other in order to protect themselves against raids of hostile neighbours. Usually the villages were fortified by walls

* I am indebted to Mr. R. de Z Hall for editing this paper.

of stones (remains of the fortifications can still be seen everywhere) or by a very dense hedge of euphorbia. Outside the fortification were not the fields but a very broad belt of land for pasture. The fields were outside this belt. The part of the land under cultivation was called *ekeremero*. The idea was to have the cattle, all the time, near the houses, since grass is lower than mtama and, therefore, a surprise from approaching enemy was rendered more difficult. The fields were cultivated individually by the family members of each house and between the fields were planted rows of mtama as boundaries. The land under cultivation was in one block so that the people working in the fields could help each other in case of danger. Only after the advent of the Europeans did the Bakuria start to leave the *oruberi* and to build their houses near their fields, which ceased to be a solidly cultivated area. Each family occupied a piece of land of its own and, in order to make the possession sure, boundaries were demarcated. Each family tried to get as extensive a plot as the elders of the *igiha* would allow. The old *oruberi* form of settlement can still be found at a few places in Utimbaru, e.g., *gunguli* Musunsu in Bukira and *gunguli* Nyanyungu in Bweregí. The fragmentation of the village into individual homesteads surrounded by the fields and pastures of one family led to the first division of land, not in exact accordance with the need of the household.

HISTORY

About eleven generations ago a Masai named Kiula with his family left his home in Kutula (Kenya Masailand) and arrived at Mtingiro in Utimbaru. His son Mugena returned to Masailand but his grandson Mwita came back to Utimbaru and settled definitely in Mtingiro. Mwita had only one son Matiku, of whom it is said that he had many wives but few cattle. Matiku had three sons, Senya, Siongo and Rugumba by one wife, and one son, Sorigi, by another. These four sons left their father's house after marriage and settled in neighbouring areas. (No tradition exists whether the country was inhabited at the time of the immigration or not.) They are the founders of the four sub-clans (*amagiha*) Musenya, Siongo, Rugumba and Sorigi of the clan Bahiri Mwita. Whilst the grandfather, Mwita, was still alive, a Masai named Kicheri who came from Nguta (Kenya Masailand) arrived in Mtingiro. Mwita and Kicheri became blood-brothers and Kicheri settled in the area Tarime. He is the founder of the sub-clan Abagicheri.

In the *gunguli* Kitakukia of Utimbaru lives the clan Abakisukia. Its founder Kisukia had a brother named Kitiamwe. Kisukia killed one of his cattle and invited his brother Kitiamwe to the feast: but he laid out the meat near human excrement. When his brother Kitiamwe arrived, he objected to this new fashion of hospitality. A heated dispute followed in which Kitiamwe accused his brother of having served the meat in this objectionable manner on purpose, so as to have all the meat for himself. Kitiamwe finally left the house of his brother and went to Mwita in Mtingiro. After a few years he became Mwita's blood-

brother, settled in Masanganya (Utimbaru) and became the founder of the Kitiamwe sub-clan of the Bahiri Mwita. The clan Bahiri Mwita is thus called after a Masai, Mwita, and four of its sub-clans after his grandsons and two sub-clans after Mwita's two blood-brothers.

PRE-EUROPEAN LAND TENURE

Kuria land tenure is, probably, a comparatively young institution, because the ancestors of the Bakuria were Masai who immigrated into the empty country. Whilst many other tribes were originally cultivators and cattle were introduced by them later, the Bakuria were cattle people who settled down with their herds and took up agriculture.

Allocation of land was exclusively in the hands of the clans, through their representatives, the clan heads and sub-clan heads. The *gunguli* was inhabited by a single clan, the *omogei* was inhabited by a single sub-clan. "The land owned the people, the people did not own the land." Uncultivated land was abundant and its allocation to a stranger was solely a question of whether the applicant was suitable for acceptance into the community, which was the family. The newcomer had at first to make friends with a member of the sub-clan in the *omogei* of which he wished to settle down; he could not expect to be allocated land before he became the blood-brother of his friend, which meant, in practice, before he became a member of the family. It was the responsibility of the friend to make inquiries into the antecedents of the newcomer. After these preliminary conditions were fulfilled, the "guarantor" took the stranger to the sub-clan head, who usually went with him to the clan head, for the sake of introduction. The applicant explained then where he wished to settle and which fields he wanted to cultivate. (This procedure refers to allocations of land after the dissolution of the *oruberi*.) No boundaries were demarcated, the man being able to cultivate up to the limit of his ability. No one cared about the size of the fields of a cultivator until another man wished to open fields in the same area; then the sub-clan head together with a few clan elders went to the spot and demarcated boundaries by planting some aloe plants (*amagaka*) or euphorbia (*amaligabana*). To the first-comer would be allocated as much land as experience had proved sufficient for him and his household.

The occupier of land obtained a good title. He could not be deprived of his plot or a part of it if he did not cultivate it. The land was heritable but the occupier had no right to sell it or to give it to some one else. The occupier lost his land only when he definitely left the place, in which case it reverted to the clan.

RECENT CHANGES IN THE RULES OF LAND TENURE

Between 1920 and 1925 a change began in the rules of Kuria land tenure which is still in progress. Originally the clan heads were also the village headmen, since each clan inhabited a geographically defined area, a *gunguli*. The newly appointed chiefs (after the war, 1914-1918)

within a few years deprived the clan representatives of all political significance and replaced them in their office as village headmen by their nominees. For instance, the *gunguli* Mwibare of Utimbaru is inhabited by the clan Abakimaro. About 1908 the village headman was Sumuku, the clan head of the Abakimaro. He was dismissed by Chief Werema on account of old age. Sumuku was succeeded by Nyamoni who was his assistant in clan affairs. Nyamoni, together with his Chief Kiongo, was sentenced to death by the Germans and executed. Nyamoni was succeeded by his deputy Macholi, who was deposed in 1918. Since then the *gunguli* Mwibari has had seven village headmen none of whom was clan head, although all belonged to the clan Abakimaro. The chiefs and their nominees began, after a short time, to assume the right of allocating land. This development caused a second fragmentation of the land into huge family holdings, probably as answer to the usurpation of land allocation by chiefs and their deputies. The sub-clans divided the best land amongst their members, thus hoping to stop the allocation of the clan land without their consent.

THE PRESENT KURIA LAND TENURE CLAN (OR PUBLIC) TENURE : *Irisisi*

The name *iririsi* is given to that part of the land which is unoccupied. Land in the *iririsi* is allocated by the village headmen or, sometimes, by the chiefs directly. It is now allocated, customarily, against payment of a present of at least Shs. 20/ , which is received by the village headman. The village headman and a few witnesses (not belonging to the clan or sub-clan of the village) arrive at the chosen plot and demarcate boundaries. The newcomer obtains a good title. He cannot be deprived of his plot or of a part of it, even if he is not cultivating it. He may allow other people to cultivate crops in it. He can bequeath it in accordance with the rules of inheritance. He cannot sell it or make a present of it to a man outside the inheritance circle. He loses his plot only if he definitely leaves it.

In present practice, the way in which the allocation is made is important, because, although the clan elders have lost the right of allocation, a newcomer will not live happily on his plot without their consent; the new occupier will, therefore, try to obtain their consent either before or after the allocation. On the other hand it happens that the village headman, perhaps not knowing the distribution of the land amongst the inhabitants, or purposely ignoring it, infringes upon the boundaries of existing holdings. If the immigrant has paid his gift no dispute will be allowed. If the newcomer has given a considerable gift, boundaries are, in return, not demarcated but pointed out to him in the old manner. The clan elders are, on principle, against the allocation of a bigger plot than a man can cultivate in one year, but if the newcomer has, in the meantime, sent a gift to the Chief, their protest will not be entertained, nor, in fact, will it be made if the elders have had previous experience of failure,

INDIVIDUAL TENURE

The name *amalemagane* is given to a holding under cultivation. It may be acquired by inheritance, in which case the title is transferred to the heir. If the heir is not able to cultivate it or a part of it, he cannot be deprived of the holding. It may also be acquired by gift, but the recipient must be a person within the inheritance circle. (The elders stated that in this case the relative must cultivate it; otherwise it would revert to the village headman. The rule needs verification.) Nowadays the transaction needs the consent of the village headman in order to become valid.

As long as the occupier of an *amalemagane* lives, he cannot be expropriated on account of neglect to cultivate it or in satisfaction of a court judgment. No case is known where an *amalemagane* which reverted to the village headman has been allotted by him *in toto* to an applicant. The village headman divided it into single fields, which he then allocated. The occupier of an *amalemagane* cannot sell it, but he is entitled to sell a house in it either for demolition or habitation, in which case it is understood that the *irisiku* (the space round the house of about 50 or 60 yards diameter) is included. The occupier can allow another person to build a house on his *amalemagane* and inhabit it; he can also allow another man to cultivate fields in it both against payment of rent or without payment of rent. The name *ahasi* is given to a plot for establishing a holding, in populated areas of the chiefdoms. In the chiefdoms of Bukira, Nyabasi, Utimbaru, Bumera, Busweta (except a few places) and Nyamongo there is not much arable land left for allocation. In the chiefdoms of Bunjari, Bweregi and Bukenye, arable land is available.* The rules of allocation vary in the case of—

- A. A man of the same *omogei*.
- B. A man of the same *gunguli*.
- C. A man of the same chiefdom.
- D. A man of the same tribe.
- E. A man of another tribe.

* In what follows I give a few statements of my informants (for what they are worth) about attempts of the Government to open up land:

About 1934 the people of Utimbaru, Nyamongo, Nyabasi and Bukira asked the Government to open up the fly country of the areas Ikorongo and Molito. The chiefs boycotted the project because they were afraid of losing the presents from the applicants for land if the Government opened up bushland and arranged the immigration into it. Further, the chiefs feared to lose a number of their subjects who would settle in these areas and thus increase the population of a few chiefs at the expense of the others. Another example is the project of opening up the areas Mkerenge, Kisaka, Kerambo and Kbugwa, an almost uninhabited area of fly bush, within the chiefdoms Busweta, Bukenye and Nyamongo. The people would have liked to colonize it, but the chiefs started trouble. Each chief wished that part of the area where his men settled should become part of his chiefdom, even if it was situated, up to then, within the boundaries of another chiefdom. These examples (if correct) show clearly the disadvantages of petty chiefdoms.

A. Allocation to a man of the same *omoge*

Such allocation is necessary if a son marries and the father possesses insufficient land to give a part of it to his son for the establishment of a new household. The sub-clan head allots the land without reference to the village headman. No fees are payable. My informants stated emphatically that even today the allocation of land within an *omoge* to a member of the sub-clan is in the hands of the sub-clan elders. The village headmen have, up to now, not interfered with this right.

The allocation takes place in instalments. An applicant never receives from a clan head an *ahasi* by a single allocation. The allotment of land in instalments is a guarantee for the good behaviour of the occupier. If he behaves badly, he would be refused the allocation of the necessary addition to his first acquisition, then he could not remain in the *omoge* because he would not have sufficient acreage for his needs. Vacant arable land is not always abundant in an *omoge* and it may be difficult for the applicant to obtain later instalments of land. In these cases (now frequent) he has to look for a man who still has more land than he can cultivate and ask him for the lease of some of his fields. At the first allocation, four or five elders of the sub-clan are witnesses. Boundaries are demarcated by planting euphorbias, trees or sisal. A plot allocated to a newcomer (usually a newly married member of the sub-clan), consists of four *ibirobo* for the cultivation of *ulezi* (eleusine). An *ikirobo* is a field, the *ulezi* crop of which will fill half of a *gala* (the little round grain store outside the house). The allocation of four *ibirobo* means that the man will receive sufficient fields to fill two *gala* with grain. The average size of an *ikirobo* is 70 by 40 yards. The applicant will also receive an *irisiku*—the plot for the house of approximately 50 to 60 yards in diameter.

A field, ready to be planted with eleusine, is called *intinde*. After the eleusine harvest, maize, sorghum or sweet potatoes are planted, during September, in the fields, now called *itolola*. After these crops have been harvested the fields are called *itobeke*. They lie fallow for three or four years and as soon as grass grows in them they are called *embona*.

In the following year the man has again to ask for an allocation of land and he receives four *ibirobo*, bordering on the fields of the previous year, if available. At the third allocation, a year later, the same procedure is followed. In the fourth year, under favourable conditions of soil fertility, the man may be able to cultivate some of the fields of the first year. If a part of the fields has not turned into *intinde* (field ready for planting *ulezi*), recognizable by species, height and density of grass, he may receive a supplementary piece of land, but a fourth allocation is a rare feature.

All fields of the various separate allocations have demarcated boundaries, whether they are isolated plots or fields in a block. Each allocation is attended by four or five sub-clan elders as witnesses. The new settler obtains a good title, similar to that in respect of *irisisi* land.

B. Allocation to a man of the same gunguli

Such allocation will be necessary if the sub-clan possesses insufficient land to give to members in need of it. If the applicant only needs an extension of his fields into the area of a neighbouring sub-clan, or if he has already received one or two instalments from his own sub-clan and asks the leader of the neighbouring sub-clan for the next instalment, he may receive this piece of land from the sub-clan head without reference to the village headman. An allocation by the village headman against the wish of the sub-clan would be useless, because the applicant living in one *omoge*i could not keep his fields in another *omoge*i without the collaboration of its inhabitants. The cattle and goats would eat the crop. If no land is available in an *omoge*i and the applicant, although being a member of the sub-clan, needs the allocation of a complete *ahasi* in another *omoge*i of the same *gunguli*, the land is allocated by the village headman. The village headman receives usually a gift of from Shs. 3/- to Shs. 10/- for one allocation, but the conditions of the deal are not rigorous because, after all, the applicant belongs to the clan of the village headman. The allocation is made in instalments and the occupier holds the same title as described above. The boundaries of the plots of each instalment are demarcated by the village headman and some elders, usually not clan representatives but *rugaruga* of the village head. (The form of the allocation may be recognised by the type of witness.)

C. Allocation to a man of the same chiefdom

The land is allocated by the village headman, who usually receives a gift of not less than Shs. 40/-, which is the payment for the first instalment of the allocation. For the succeeding instalments the payments are much smaller, especially if the new settler ingratiates himself with the village headman. Allocation by instalments, boundaries and title are as described above.

D. Allocation to a man of the Kuria tribe who immigrates from another chiefdom

The land is allocated by the village headman. The applicant must first make arrangements with the sub-clan in whose *omoge*i he wants to settle down. Usually he will first live in the house of a friend or in the house of a sub-clan member to whom he was recommended by one of his neighbours in his place of original domicile. This will enable the "guarantor" to make enquiries into the reason for his emigration. The same procedure of allocation applies and the title is similar.

E. Allocation to a man from another tribe.

The land is allocated by the village headman. A stranger, newly arrived, will never receive land at once. He has to make arrangements to live with a member of the tribe and only after several years can he ask for an allocation of land. He must first become a bloodbrother of a member of the tribe. If the stranger has sufficient means he may try to

take a wife of the tribe, in which case his brothers-in-law are equivalent to bloodbrothers. Very often the bloodbrother will pay the gift to the village headman because it is expected that the latter will be content with a smaller amount if it is paid by one of his subjects.

The allocation is made in instalments, boundaries of the plots are demarcated and the occupier holds the same title as described above.

Allocation by Chiefs and Village Headmen

Recent cases are known from nearly all chiefdoms where chiefs and village headmen have allotted plots of twelve and more *ibirobo* in one allocation. The causes for such allocations in contradiction to the customary procedure are manifold: political friendship, considerable gifts, relationship by blood or marriage. It is difficult for the occupiers of such land to become popular with the neighbours and should it happen that the Chief or the village headman is deposed, quarrels usually start immediately.

Allocation of single fields

A. Permanently

It seldom happens that a man who has recently been allotted an *ahasi* obtains a single field later on account of an increase of his family. If he needs more land he is supposed to obtain it by asking landowners who do not need all the land they possess for a lease. Single fields are only allotted to members of the sub-clan living in the *omoge*i. For instance, a son receives a plot within his father's land when he marries. If he marries a second wife, he has a chance of obtaining a few additional fields in the clan land. The allotment of additional fields is in the hands of the sub-clan head, who need not ask the village headman for his consent.

B. Temporary

Both strangers and clan members may be allowed to cultivate fields temporarily. The permission is only given for one year. Such fields are allotted by the sub-clan head and no fee is paid. The allocation takes place in the presence of at least three witnesses and it is expressly stated that the allocation is temporary. Usually elders of a neighbouring sub-clan are called as witnesses as a precaution, so that in case of later litigation (if the occupier should declare that the field was given him for permanent occupation) the witnesses will not be brothers or near relatives.

FAMILY TENURE

The name given to a huge holding vested in the head of a family is *rerima re tata umukuru*. These family holdings were never allocated in the proper sense of the word. A few recent cases are known where chiefs allotted huge holdings to friends. When fragmentation of the clan land into huge family holdings took place, boundaries were demarcated. There is a tendency nowadays to fortify the old boundaries by planting sisal along them. The conditions of tenure are the same as described above.

Chiefs and village headmen frequently disregard these rules and allot fields or *ahasi* situated within the boundaries of a *rerima re tata umukuru*, particularly individually-owned land which is not cultivated or from which the crops have been harvested.

LEASE OF FIELDS

This is the most frequent method of acquisition of land for cultivation. If a land owner (*umusabwa we rerima*) agrees to give an applicant (*umusabi we rerima*) a piece of his land for temporary cultivation, he and witnesses consisting of his sons, relatives and neighbours show the man the boundaries of the field. These are usually demarcated by hoeing along the boundary lines and planting sorghum along them. Rent is never asked for. The landlord can, at any time, give notice to the cultivator to give up the field, but the cultivator is entitled to harvest the crop he has planted. If the cultivator planted cassava in the field, he is entitled to keep the field until the cassava is mature and can be harvested.

In olden times this institution worked well and guaranteed an equal distribution of arable land with regard to the needs of cultivation rather than to ownership. If the leaseholder cultivated a bigger piece of land than that allotted to him, the landlord did not mind because he felt himself secure in his possession. Nowadays the owners of land are very reluctant to have strangers on it, because they are afraid to lose it by a Court decision of bribed judges. Thus they prefer, from the beginning, to avoid complications and refuse to have temporary cultivators on their land. As a consequence, men with insufficient fields for their needs are forced by sheer necessity to acquire land by illegal means, e.g. by stealing and consequent bribery. The profits of these transactions go to the chiefs and village headmen.

GRAZING

Grazing is free in all public land and in all unfenced fields. Only plots which are properly fenced in can be claimed by the owner as private pasture (*uborochokirio*). (My informants could not agree whether an unbroken fence is necessary or whether the old, primitive demarcation of an *uborochokirio* is still sufficient today). On clan-owned grass land (*amarizilio*) the grazing is free to everyone. It is usually the land from which allotments of *ahasi* are made. Every allocation of land for cultivation decreases the area of pasture, especially in cases where the occupier fences in his plot and thus excludes others from grazing their cattle after the harvest.

CONCLUSION

All land in Bukuria was clan-owned and was allocated to applicants by the clan heads or sub-clan heads. Originally the clan heads were also the village headmen, because each clan inhabited a geographically defined area, a *gunguli*. The chiefs appointed by the Europeans deprived, within a few years, the clan representatives of all political significance and

replaced them in their office as village headmen by their nominees. The chiefs and the new village headmen began to assume the right of allocating land. The clan leaders considered this act of usurpation even more unfair than their deposition as village headmen, because the right of land allocation was exercised by them not as village headmen but as clan representatives. They were too weak to resist the change openly, but they divided the land amongst themselves as a counter measure and demarcated boundaries for the individual plots, thus hoping to stop the allocation of clan land by the chiefs and village headmen without their consent. In this way a family tenure was created which led very soon to an unequal distribution of land in the second generation, according to the number of sons.

The chiefs and village headmen, ready as usual to take bribes, allotted to men who could pay for them plots within the boundaries of land held under family tenure or even under individual tenure, which the owners did not cultivate. The clans and their leaders directed, and still do so, their resistance against those applicants for land who received it directly from the chiefs or village headmen. Continuous litigation is the result.

The traditional procedure for allocating land was an allocation in instalments during several years, whereby it often happened that the new settler did not receive the last instalments but had to lease fields from those people who had more land than they could cultivate. The leasing of fields was the most frequent method of acquisition of land. On account of the general corruption of the Native Courts, land owners are now reluctant to take leaseholders into their land because they are afraid of losing part of it if a leaseholder refuses to evacuate the fields and engages the help of judges by bribery in litigation.

The Kuria land situation is unsatisfactory. It is difficult for a new settler, even if he is a member of the sub-clan, to obtain sufficient land for his needs. The method, which a land-hungry peasant now often employs in Bukuria in order to overcome the difficulty is to steal land. He ploughs or hoes with the help of friends, at night, into the untilled land of his neighbour. Usually narrow strips, about one yard broad, are ploughed, with empty spaces between them so as to cover as much ground as possible. On the next morning trouble is rife with the owner. The village headman is called to the spot, but if he has been bribed by the transgressor, he will declare the uncultivated land is *ardhi ya Serikali** and will confirm the theft as a legal allocation.

The result of the present system of Kuria land tenure is a scarcity of land in many parts of the country which is, probably, not so much caused by absolute scarcity as by an unusual degree of lawlessness and by an unequal distribution of the land as its consequence although, according to statistics, the acreage per head of the population is not excessive.

* Government land.

Notes on the Wadigo

By the late H. M. T. Kayamba

(Edited by D. L. Baines and H. V. Hartnoll)

Wadigo Elders who assisted in producing these notes:—

Magongo Mwamoyo, Ngamiani, Tanga.
 Panduka Mwasega (Dead), Mwahako, Tanga.
 Wendo Mwabege (Dead), Mwakidila, Tanga.
 Asumani Mwaliku (Dead), Mwakidila, Tanga.
 Salehe Mwachitswa (Jumbe Mkuu Pongwe), Pongwe.
 Mwaziho Ndege, Mwakidila, Tanga.
 Ganiko Mwazobe, Jaje, Tanga.
 Wendo Mwamtwa, Mwakidila, Tanga.
 Balozi Mwaduga, Mwakidila.
 Abdallah Mwamzandi, Jaje, Tanga.
 Mshihiri Mwanyumbwe, Mwakidila.
 Kubo Mwamlamba, Jaje, Tanga.
 Nzori Mwamheya, Mwazange, Tanga.
 Mwamkande Veso, Mwahako, Tanga.
 Mwajamvi Veso, Mwakidila, Tanga.
 Kubo Mwamambeya, Mwazange, Tanga.

Prefix *mwa* means *bin*—"son of."

THE WADIGO.

Some ten generations ago there was a tribe called the Wambokomu which inhabited the country known as Chungwaya, North of Lamu.

It is related that the Wasegeju and the Wagalla, who were neighbours of the Wambokomu, fought. The Wagalla were a powerful tribe, consequently the Wasegeju invoked the assistance of the Wambokomu in their war against the Wagalla. The combined tribes were defeated by the Wagalla and driven South. The Wambokomu migrated to the countries South of Lamu. They were divided into five sections. The first section now called Wagiryama went to Giryama country and settled there. The second section now called Wachonyi settled in the Chonyi country. The third section called Waribe settled in the Ribe country. The fourth section, Waduruma, settled in the Duruma country. The fifth section, namely the Wadigo, settled at Kinondo and along the coast strip from Mombasa to Tanga.

Before the advent of the Wadigo the Wabondei tribal bands extended to the coast. On hearing the news that a host of Wadigo was coming from the North, the Wabondei retired from their villages near the coast

into the country now called Bonde. Whereupon the Wadigo occupied the Bondei villages without a fight. The Wadigo had no chief at the time. Each elder of a family ruled over his own. There was no special authority to decide Digo tribal affairs. The result was that the poor people were oppressed unmercifully. It is said that if a weak man broke a chair of a strong man by accident he was sold in compensation for the breakage of the chair. Chaos and oppression were the order of the day. The more powerful a family, the more tyrannical were its members: and there was no tribal authority to which the aggrieved could appeal for redress.

After a time the Wadigo decided to establish tribal authorities. It was therefore agreed amongst themselves to hold a grand tribal meeting called *Mngaro* at a certain pond near Shimoni. The people crowded into the pond displacing the water by their numbers. Many were trampled under foot in the process. This function went on for about three months until the pond was quite dry. No person was allowed to leave the lake and go home.

When the lake was dry, they smeared themselves with mud and returned to their villages. Each person was taken in turn to his house and his wife asked to identify him. If she did she paid a goat as a fee for identification. These words were used to the wife, *Chikumbu kumbuchila mulumeo* i.e. "If you can remember, identify your husband." When all Wangaro had been identified by their wives, they returned to their houses. Then each village selected three persons to fill up three grades of a council which was assembled after the *Mngaro*.

1. *Mwerya*.
2. *Mugwa*.
3. *Mdowe*.

These three chiefs of each village periodically sat together at the council and judged the Wadigo with the assistance of the village elders.

In addition to this open council the *Mwerya*, *Mugwa*, and *Mdowe* established a secret council to which the village elders were not admitted. The village elders in due course became curious about these secret meetings of the three dignitaries but could only obtain the information that it was *Ngambi* and could not be revealed to persons who were not members.

Eventually certain elders applied to be admitted into the *Ngambi* and were charged entrance fees, etc., to become members. This was the beginning of the *Ngambi* council.

The following fees are charged for membership of the *Ngambi*. *First fee*—a fowl and two jars of palm wine. This fee is called *Akagwirwa mkono wa Ngambi* i.e. "His hand is held by the *Ngambi*." *Second fee*—one goat and two pots of *ugali* (thick porridge). This fee is called *mahundu* i.e. the first goat to be received by Wangambi as fee. *Third fee*—one goat,

one fowl, 18 jars of palm wine and two pots of *ugali*. This fee is called *Mbuzi ya Mhajizo* i.e. a fee for introduction into the Ngambi. *Fourth fee*—one goat, one fowl, 12 jars of palm wine and two pots of *ugali*. This fee is called *Mbuzi ya Chikupu* i.e. a fee for permission to put palm wine into a calabash and take it to a member's family at the village after the member has had enough himself. *Fifth fee*—one goat, two jars of palm wine, one fowl and two pots of *ugali*. This fee is called *Mbuzi ya Luwingu* i.e. a fee to acquire the right to drink palm wine with a small ladle called *luwingu*. Before this fee is paid the member is not allowed to use a ladle for drinking palm wine. *Sixth fee*—one goat, 16 jars of palm wine, one fowl and two pots of *ugali*. This fee is called *Mbuzi ya Mlija* i.e. a fee for permission to use a sucking tube for sucking palm wine from a calabash. *Seventh fee*—half bullock's meat, one goat, 12 jars of palm wine, 4 pots of *ugali* and two fowls. This fee is called *Mbuzi ya Uguta* i.e. fee for vice-presidency of the Ngambi. *Eighth fee*—3 cattle, 4 goats, 30 jars of palm wine, 12 fowls, and 8 pots of *ugali*. This fee is for the highest grade of the Ngambi—*Mchamu*—President of the Ngambi.

The grades or ranks of the Ngambi are therefore:—

1. *Wamkono*.
2. *Mwajizo*.
3. *Wachikupu*.
4. *Mluwingu*.
5. *Chiboma na Mriza*.
6. *Mlulinga*.
7. *Mguta wa Chamu*.
8. *Mchamu*.

The following are the functions and privileges of the holders of the above ranks:—

- (a) *Wamkono* generally serves the higher members of the Ngambi.
- (b) *Mwajizo* distributes palm wine to the higher members of the Ngambi.
- (c) *Wachikupu* are privileged to put palm wine into their calabashes and drink it. They can also take some palm wine from the Ngambi to their families at home when they have had enough themselves.
- (d) *Mluwingu* has the right to pour every third small calabash-full of palm wine into his big calabash (*kiboma*) and take it to his families at home.
- (e) *Chiboma na Mriza* has a right to pour palm wine into his big calabash *boma* and suck it with his sucking tube.

NOTE.—No member is allowed to carry palm wine outside the Ngambi unless he is so authorised to do so by payment of the necessary fees as above.

- (f) *Mlulinga* has a right to use a ladle for drinking palm wine and can also take what is left to his family at home.
- (g) *Mguta* has a right to use any utensil for the purpose of drinking palm wine. He is second in authority.
- (h) *Mchamu* is the President of the *Ngambi* and absolute authority.

NOTE.—If *Mluwinga* has not paid a goat for his fee, he is called *Mluwinga wa Makaka* i.e. he is not a perfect *Mluwinga* and is therefore not entitled to use a big calabash *Kiboma*.

Jar=*Nziro*. Palm wine=*uchi*.

Palm wine that is given to *Wangambi* is called *Mwenjiro wa Ngambi*. In the olden days each village gave palm wine to *Wangambi* free on special occasions.

WEEK DAYS OF THE NGAMBI.

1. *Kwaluka*—1st day.
2. *Kulima wira*—2nd day (day of cultivation).
3. *Kufusa*—3rd day (Eve of *Chipalata*).
4. *Chipalata*—4th day (Festival of *Ngambi*).

JUDICIAL POWERS OF THE WANGAMBI.

The *Wangambi* had powers to try criminal and civil cases assisted by the elders of the villages.

ADMISSION TO AN NGAMBI MEETING.

No person is allowed to enter the *Ngambi* hut unless he is a member of the *Ngambi* and has paid the necessary fees. If a person wants to take his case to *Wangambi* during their sittings in the *Ngambi*, he approaches within 30 yards of the *Ngambi* hut and knocks his stick with a knife to attract the attention of the *Wangambi*. One *Mngambi* then goes to him to hear his case and reports it to other members in the *Ngambi* while the complainant returns to his village. The matter is first discussed by the *Wangambi* in the *Ngambi* hut and then judgment is given by them at the complainant's village after hearing the other side of the case at the village. Village elders are consulted before the judgment is promulgated.

KANHA YA NGAMBI—MARK OF NGAMBI.

The signal mark of the *Wangambi* is made of a coil of grass tied to a piece of stick. This mark is used to mark places or properties which *Wangambi* order not to be passed or touched. For instance, if the *Wadigo* complain to the *Wangambi* that coconut thefts are prevalent in a certain area, the *Wangambi* place their *Kanha ya Ngambi* on all sides of the said area indicating that no person is allowed to pick coconuts from the area

so marked. If any person is caught doing so he is severely punished when brought before the *Wangambi*. It is said that the German Government made use of the *Wangambi* on occasions to stop coconut thefts in the Digo country.

THE BURIAL CEREMONY OF THE WANGAMBI.

On the death of an *Mngambi* his relations give a goat and one jar of palm wine to the members of the *Ngambi*. The goat is called *Wachamula chiriro* i.e. the beginning of the mourning. If a goat is not given by the deceased's relations to the Council no mourning is permitted.

If the deceased is a rich man, an additional goat is given to the *Wangambi* on the second day of the mourning. This goat is called *Mbuzi wa chiwala* i.e. a goat of *chiwala* (mourning dance of *Wangambi*).

On the third day another goat is given to the *Wangambi*. This goat is called *Wamtsamo* i.e. a goat given to end the mourning.

NGATE—THE GRAND COUNCIL OF THE WADIGO.

When the Wadigo were ruling themselves and had to decide the issues of war and peace, they held a grand council called *Ngate* which dealt with all such important matters.

Ngate was alternately held at Pande (Pongwe) Mabatini (Gombero), and Mguwe (Moa). If the *Ngate* decided to make war on another tribe, the *Wangambi* placed their marks on all roads leading to the enemy's country. No Mdigo was then permitted to pass the marks and visit the enemy's territory. If an Mdigo passed the marks, all his property was confiscated.

1. NOTE.—Wadigo say that Jumbeship is not a Digo rank or title. Jumbes in the Digo country in the Tanga District were first introduced by the German Government. Certain Wadigo in Kenya were elected Jumbes by their own people, who copied the Wakilindi system of Jumbeship — “Zumbe” is a Kilindi title which means “lord.”

2. NOTE.—On account of the spread of Mohamedanism amongst the Wadigo, membership of the *Ngambi* is decreasing fast. No one joins the *Ngambi* these days. The orgies of drinking palm wine at all the *Ngambi* ceremonies and burial rites are objected to by the Mohamedans and are the main source of the gradual extinction of the *Ngambi*. The present members of the *Ngambi* are the remnants of an old age and it is thought that the *Ngambi* will not survive after the present generation.

WADIGO BELIEFS.

This part only deals with the primitive beliefs of the Wadigo, which have now been chiefly superseded by the Mahomedan code. However, it must be remembered that the Mahomedan Wadigo are still deeply

superstitious and openly perform their primitive rites and ceremonies in defiance of the Mahomedan doctrine, especially in adverse circumstances, such as: famine, drought, sickness and troubles.

The primitive Wadigo worship the spirits of their dead parents called *Koma*, which they believe have their abode in graves, caves, and under huge trees—called *Mizimu* (places of spirits).

Wadigo say they know in their simple way that there is God on high, whom they call *Mulungu* (God). But their knowledge of Him is not sufficient to enable them to worship Him as Christians and Mohamedans do. They refer to Him whenever they perform their rites but do not appeal to Him direct except through their *Koma* or *Mizimu*. Their knowledge of Him is vague and appears to be the result of natural instincts.

Mzimu or *Mzuka* is an evil spirit which is said to exist in caves or on big trees. Wadigo offer their prayers to this spirit for the removal of their adversaries.

CEREMONY PERFORMED FOR MZUKA.

The Wadigo sweep the cave in which the *Mzuka* is supposed to live whenever they wish to sacrifice to him.

For instance: If a child is sick and a diviner says that *Mzuka* has harmed it, the parents and relatives of the sick child go to the cave of *Mzuka* and offer him a fowl and *Ugali*. They eat some of the fowl and *Ugali* themselves in the cave and leave some for *Mzuka* in the cave. They then pray to *Mzuka* to remove his spell from the afflicted child.

In case of famine and drought—Wadigo go to an *Mzimu* and sweep it. The leader repeats:—*Uwe Mzuka hukeza hiwa mvula ikaangamika bassi huna voya kwako maana una hurera hizi siku mvula ichinya una nyungu mbili za wali na mbuzi nyerevu*, i.e., "Oh! *Mzuka* we have come here because there is no rain and we make a vow to you that if rain falls we shall sacrifice to you a white goat and two pots of *Ugali*."

When it rains they take a white goat and *Ugali* and sacrifice to *Mzuka* at the cave or under a big tree (whichever is the abode of their particular *Mzuka*). They eat some of the goat and *Ugali* themselves in the cave and leave a handful of both for *Mzuka*. They also dance to *Mzuka*.

In Tanga, the Wadigo have their *Mzuka* at Mwanabayawe near Mwambani. It was a big tree but has now been cut and there remains only a big hole in which they still offer their sacrifices for rain.

Wadigo believe that the flesh of a dead person decomposes, but that his soul lives for ever in paradise, which they call *Kuzimu*.

They also believe that the spirits of their dead parents hear them when they offer up their prayers to them.

It is believed that dead parents appear to them in dreams and possess spiritual powers with which they can effect cures.

If an Mdigo is sick his relations go to a diviner who divines that the spirit of the sick man's dead father has caused him his illness. The dead father is probably stated to be angry because he has been forgotten, and requires in propitiation that a goat, palm wine, and *Ugali* should be offered at his grave. They then take the sick man together with a goat, *Ugali* and palm wine to the deceased's grave. The goat is then killed and eaten. A small piece of meat and *Ugali* is placed on the grave-stone—called *Iwe ra mbirani*—and the blood of the goat sprinkled on it, palm wine is placed in a coconut shell at the head of the grave. They then cut a thin strip of the goat's skin and tie it on the sick man's hand.

When this has been done the party returns home confident that the sick man will get better.

MARRIAGE.

An Mdigo girl wears a loin cloth like a small skirt called *Urinda*. Below the knee she wears brass rings called *Tanda*. On the ankles she wears brass anklets called *Vidanga*. On the upper arms she wears armlets or arm rings called *Karine*. She covers her body with a short loose blue cloth called *Kitambi cha kaniki*.

A boy who wants to marry courts the girl he loves. If the girl loves him she tells him, *Nikakumenza nzoo ubwage*, i.e., "I love you. Come home and pay the dowry."

The boy then goes to his father and informs him of the engagement. *Baba nikaona mchetu*—"Father I have seen a girl." The father replies *Ni mwana yani?*—"Whose daughter?" *Ni mwana fulani*, i.e., "She is so-and-so's daughter." *Ukamenywa?*—"Does she love you?" *Sinamenywa*, i.e., "She loves me." *Halla ngombe hii ukabwage*—"Take this cow and pay the dowry." The boy takes the cow and pays it to the girl's father as a dowry.

The boy then goes to his betrothed and sleeps with her. On the next morning the girl's grandmother asks her—*Nimulume si mulume?*—"Is he potent or not?" She replies, *Ni mulume baba na awochele mali*. "He is potent, father may receive the dowry."

The boy then pays two cows and one ox, in addition to the first cow paid, and takes his fiancée to his village where the wedding takes place—(*Nyambura*—Marriage).

Thirty bushels of millet are pounded and cooked into *Ugali* (thick porridge) by the bridegroom's relations for the wedding feast, which lasts three days. A fowl is killed each day for the feast. The bride eats nothing during the three days of the wedding and she only drinks green coconut water.

On the second day the bridegroom's father sends seven calabashes of castor oil as a present to his daughter-in-law.

On the third day the bride is taken out and shown round the village. Guests gambol about and make great rejoicings and conduct the bride to her mother-in-law's house. The mother-in-law gives her a hoe or a few shillings as a present; the bride is then permitted to speak to her mother-in-law. If the mother-in-law gives her nothing she is not permitted to speak to her until she does so. The bride spends the day in her mother-in-law's house and returns to her own house in the evening. She does this every day. She cooks in her mother-in-law's house and sleeps in her own house for about one year.

COOKING-STONES CEREMONY.

When the bride becomes tired of cooking in her mother-in-law's house and wishes to cook in her own, she asks her mother-in-law to make her cooking-stones (*Mafiga*) in her own house. The mother-in-law tells her to bring from her parents one basket of flour, one basket of whole maize and one fowl. When she has done so a feast is prepared at the girl's house and three cooking-stones are placed by the mother-in-law in the house. She is then allowed to cook in her own house.

The husband then pays to his father-in-law two goats—one he-goat called *Mbuzi wakigube* and a she-goat called *Mbuzi wamlala*. The father-in-law then calls his relations and kills the he-goat. At the feast he will inform his relatives about the marriage of his daughter.

The she-goat is kept for the bride and is her own property.

If the husband does not pay the last two goats he will be required to replace each cow that dies out of the cattle paid by him as dowry to his father-in-law.

MARRIAGE BY ABDUCTION.

In the olden days it was a frequent occurrence amongst the Wadigo for an Mdigo to abduct a girl from a dance and marry her. Such a marriage is called *Kuiya*. The procedure was usually:—At a dance a youth selected the girl he loved and proposed to her. If the girl accepted the proposal she eloped with him to his home where she was married. But before the girl eloped with a youth she told a friend to tell her father that she was eloping with so-and-so and that her father should follow her to the youth's home to demand the usual dowry. The father would then follow his daughter and demand the dowry from the parents. If the parents paid the marriage ceremony was made. But if they did not or could not pay the dowry, the girl's father would demand *Chilavya nyumbani*—payment for removing the girl from the house.—one cow or forty shillings. If this was not paid a fierce fight ensued between the members of the two families.

DOWRY—MAHUNDA.

The payment of the dowry (*mahunda*) is not considered as the

purchase price of a wife. It is simply a token of marriage just as a wedding ring is amongst Christians. There is no marriage tie between Wadigo couples if the dowry is not paid. Nor will a woman be recognized as married unless *mahunda* has been paid for her. If the dowry is not paid the woman is considered to have lost caste. Likewise an Mdigo wife does not respect her husband if he fails to pay the dowry. The husband will be informed, "You have no right to trouble me or interfere with me because you have not paid a dowry for me." A husband cannot sell his wife because he has paid a dowry for her, nor can he mortgage her for his debts. If the husband divorces his wife the dowry is returned to him. The children of the father who has not paid the dowry belong to the mother and the father has no right over them unless he pays the dowry. A woman who is married without a dowry is regarded as unmarried.

If an Mdigo marries a woman before the dowry is paid an agreement is usually made as to the mode in which the payment of the dowry will be made in the future. If the husband begets daughters by the wife before the dowry has been paid, he cannot receive the dowry himself on account of his daughters, the dowry will be paid to his brother-in-law or his father-in-law. The amount so received in dowry by the brother-in-law is, however, credited to the unpaid dowry due to the father of the daughter until the whole dowry has been paid. Any balance left over after deducting the dowry due by the father will be divided between the father of the daughter and his brother-in-law or father-in-law.

If there is no issue to the marriage the parents-in-law will be free to take away their daughter if the dowry has not been paid.

If the husband cannot pay the dowry on account of poverty and his wife loves him he will go and live with his parents-in-law and serve them. This service is called *Kufunga jengele* (to close the door). He will serve his parents-in-law until he pays the dowry or dies there.

Wadigo do not marry their sisters or children of their maternal aunts. It is lawful for them to marry their uncles' daughters—whom they call *Mkoi* (singular).

AGE OF MARRIAGE.

Age of puberty.

A younger sister can be married before her elder sister. When the younger sister is married before her elder sister she gives her neck bead to her elder sister (*Chiwingu*) to wear. It is a token of her best wishes for her elder sister that she may meet with the same luck as herself and be married soon.

WIFE'S PROPERTY.

Any property that a wife possesses before and after her marriage is her own and is inherited by her own relations and not her husband. (See Inheritance). A girl on her marriage takes to her new home fourteen calabashes of castor oil and one mat.

Dowry is not returnable to the husband on the death of his wife.

SENIOR WIFE.

The wife who is married first is senior to all others and is called the head wife. She is considered to be the mother of the whole family. Junior wives obey but do not work for her.

The crop harvested from the husband's farm is distributed by her to the other wives. All the property of the husband, such as cattle and money, is kept in her house.

POLYGAMY.

An Mdigo is free to marry as many wives as his wealth permits. In most cases Wadigo do not exceed six wives.

If a husband has many wives he sometimes keeps them in different villages in the Digo country. If he has all his wives in one village he either keeps two wives in one house (but in separate apartments) or in separate houses.

ADULTERY.

If a man commits adultery with another man's wife he is ordered by the elders to pay damages—called *Malu*—one to two bullocks. No penalty is imposed on the guilty wife. The bullocks paid as *Malu* (damages) are divided as follows:—one is paid to the husband and one to the guilty wife's relatives. If the husband refuses to give one bullock to his wife's relatives, when he divorces her two bullocks will be deducted from the returnable *Mahunda* (dowry) on this account.

If a man gives snuff tobacco to a married woman, and she reports the matter to her husband, the man will be charged *Kukatwa kilomolomo*, (to stop his seductive talk)—one goat.

Certain women when they know that their husbands have committed adultery with other married women, betray their husbands by passing the information to other women, whom they know will certainly in their turn carry it to the wives' husbands.

In former times it was permissible for a husband who caught another man committing adultery with his wife to kill him on the spot.

One goat is paid as damages for deflowering a virgin.

DIVORCE.

An Mdigo who divorces his wife sends her back to her home and demands the return of the dowry paid by him. Usually he does not claim his children. The children are taken by their mother. The next husband who marries her pays the dowry and takes her with her children.

If the father-in-law has no property and is unable to return the dowry he tells his son-in-law to wait until the divorced wife marries another husband when the dowry paid by the next husband will be refunded to him. But he asks him if he wants to take his children instead of the dowry: the man replies, "I do not want the children, give me my money. I have got children in the bundle of my loin cloth"—(*Simenzi wana nipa mali yangu ana hiwa bindoni*). It is thought that an Mdigo husband does not value his children because they do not inherit from him; and he is not free to dispose of them whenever he gets into trouble. (See Inheritance).

LAND.

Wadigo say that all land (*mitsanga*) belongs to God, grass (*vuwe*) belongs to the occupier of the land, who must have marks on the land such as coconut and mango trees as a proof of his occupancy.

An Mdigo claims *vuwe* (grass) to be his property because after clearing the land of all the big forest trees the grass grows as the result of his labours.

According to the ancient Wadigo custom every owner of a plantation had a right to sell his fruit trees but not the land which was regarded as belonging to God.

A piece of land which an Mdigo cultivates and plants with mango, coconut trees and food crops (*munda*—farm) is his and on his death is inherited by his heirs.

Vacant land is free for any Mdigo to use. Grazing land is not supposed to be used for cultivation, but any Mdigo may use it at his own risk, and is unable under the Wadigo custom to claim compensation in the event of his crops being destroyed by grazing cattle.

In the olden days no land was sold for money or bartered for goods, etc., permission had to be obtained from the previous occupier to use it. Unoccupied plantations with coconut and mango trees could not be used without the consent of the owner of the trees.

Any unused shamba land could not be used by a newcomer without the permission of the last occupier, his heirs, neighbours (in the absence of the last occupier or his heirs) or elders of the village. If a newcomer was permitted to use it he could plant coconut and mango trees on it and the plantation was his own and on his death his heirs inherited it.

Boundaries of plantations were marked with pea-trees (*mbaazi*) or pineapple trees.

The alien custom of selling of land for money dates from the German occupation. In order to acquire land from the natives the German Government enquired into the ownership of certain Digo lands, which it eventually purchased. Individual Wadigo villagers who claimed the land to be theirs through longer occupation or hereditary rights sold it. For instance Wadigo of Kange sold Kange land and Kiomoni sold Kiomoni. Hence every Mdigo now claims the land he occupies to be his own personal property.

NOTE.—Plantation or farm in disuse is called *vuwe*; plantation or farm in use is called *Munda*.

If a stranger wishes to start a new farm he applies to the elders of the village for vacant land. The elders first enquire as to whether the land in question was ever used for *Fingo* i.e. a medicine buried under the earth and marked with a big stone or tree for the protection of human beings or livestock against wild animals or enemies, in which case the land cannot be used for cultivation. If it was not used for this purpose he would be permitted to cultivate it.

Certain big forests were not allowed to be used for cultivation as these were used as hiding places during the Masai raids. Forests and grazing lands were held as common property of all the neighbouring villagers.

NOTE.—Forest—*Tsaka*.

A neighbouring shamba owner has a right to permit a stranger to use an abandoned shamba adjoining his holding in order to rid himself of the wild pigs which would otherwise harbour themselves in the overgrown shamba and raid his crops at night.

DEATH CEREMONY AND INHERITANCE.

When an Mdigo dies his body is wrapped in a shroud and matting, and buried. His relations mourn and dance (*madele*). Women smear themselves with castor oil while in mourning. The mourning ceremony lasts four days. On the fifth day they make a feast and invite distant relations and friends. They kill one ox and cook *ugali* for the feast: much palm wine is consumed. This day is called *Lusinga*.

After *Lusinga* the bereaved person remains indoors for fourteen days. On the fifteenth day all the near relations of the deceased assemble and divide the deceased's property—called *Ufa* (inheritance).

Sons of the deceased are given as their share of the estate—bows, arrows, knives and hoes of their late father.

All the livestock, slaves, money and coconut plantations of the deceased are inherited by the children of the deceased's sister and his own children by a concubine.

Generally the eldest nephew takes charge of the whole estate and distributes its proceeds to other nephews and nieces and children of the deceased by a concubine.

If they quarrel over the estate, the whole estate is distributed amongst them.

Deceased's wives are also inherited by his nephews. The eldest nephew has the first choice.

The deceased's daughters are given in marriage by the deceased's eldest nephew who also pays the dowry for the deceased's sons on their marriage. He actually acts for his deceased's uncle in all matters concerning his children and discharges the parental duties on his behalf.

If the deceased has a brother, the latter inherits his property before all other heirs.

According to the ancient Wadigo custom a man has an absolute right to sell his children born by his concubine and his sister's children in order to discharge his debts or in case of famine to buy food, or, if he has committed murder, as compensation for the murdered person. But he is unable to sell his own children by his lawful wives for any purposes whatsoever.

HEIRS.

- (1) A full brother has the prior claim to the inheritance of his deceased brother or sister.
- (2) Concubine's children, nephews and nieces (children of the deceased), inherit equally.

EXAMPLE.—If a married woman dies and leaves an estate, her full brother inherits it. If the brother dies before her and leaves a son born by a concubine, the son inherits. In the absence of both, her sister inherits it. On her death the property will pass to the next-of-kin of the female line. But the son of the deceased's brother by a lawful wife is not entitled to inherit.

The illegitimate son of an unmarried girl is treated as full brother of his mother's legitimate sons and inherits equally with them from their mother or maternal uncles, aunts, etc.

Concubine is called *Mkazangu wa Kwawabo*, i.e., a homeless wife.

THE BASIS OF THE WADIGO RIGHT OF INHERITANCE.

Wadigo custom strictly bases the right of inheritance on the maternal line.

Children of sisters inherit from their mother and maternal uncles, aunts and cousins.

Children of brothers inherit from their mother and maternal uncles, aunts and cousins: but not from their fathers or paternal uncles, aunts and cousins.

Children of concubines inherit from their fathers and mothers (and in exceptional cases from their paternal lineage if there are no other heirs to debar them).

If a husband dies and leaves a wife who refuses to be inherited by the deceased's relations, her relations will return the dowry to the deceased's relations.

The above system of inheritance is in accordance with the old Digo customs. But it is now falling into abeyance owing to the majority of the Wadigo being Mohamedans and inherit according to the Mahomedan law of inheritance.

OATH.

Witnesses do not take an oath before giving evidence in a case.

If an Mdigo sues another for a debt before the elders and Wangambi, and the defendant repudiates the debt, he is ordered by the Court to swear by *Nyungu* (an unburnt pot) as follows:—He holds a castor stick and states:—*Mimi chikali deni hii ni yangu kweli na nife na lukolo lwangu losi.* (If I truly owe this debt I should die with my whole family). He then hits the pot with the castor stick and breaks it into pieces. The pieces of the broken pot are taken by four elders and hidden away. It is believed that if the defendant lied the broken pot would kill him and his whole family.

If after this a member of the defendant's family dies, the defendant goes to a diviner who probably decides that the death has been caused by the broken pot. The defendant then goes to one of the four elders who hid the potsherds and asks him to produce a piece of the broken pot in order that medicine be made to stop the oath from killing other members of the family. The elder usually charges a fee and orders him to bring a goat and a fowl which are killed and their blood is put in a pot. A piece of the broken pot is then ground to dust and mixed with the blood is put in a pot. A kinsman is then called, takes the blood and says:—*Nikakuwozani nawoza mlyangu uwole zila mali ziliya akariwa nyungu mia mongo.* (I heal you and wish you all to be well. The defendant has paid the money which he owed and the disease shall remove from the body of the family and fly away). He then sprinkles the blood and medicine on the whole family and the family is considered to be purged from the effect of the broken pot. The accused first pays the debt before the medicine is made. No person can be sworn by *nyungu* unless his relations agree to it, because the oath affects the whole family if the defendant has lied.

OLD CIVIL AND CRIMINAL PROCEDURE OF THE WADIGO.

In the olden days when Wadigo ruled themselves, the following procedure was followed in Civil and Criminal cases.

The complainant first notified his relations about his complaint, and then took it before the elders and *Wangambi*, who notified the defendant about the case before the date of hearing. The elders and *Wangambi* fixed a day for the hearing of the case. The parties brought their relatives with them on the day of hearing. If it was a civil case or theft, the defendant or accused defended himself, or, if he preferred, one of his relations pleaded for him. If he was accused of murder, adultery, or witchcraft he could not defend himself lest he ran the risk of being shot with an arrow by the complainant or his relatives at the council. He therefore appointed one of his relatives to plead for him. After the case had been thoroughly contested by both parties, the elders and *Wangambi* went to a private place to deliberate the evidence heard by them, and form their judgment. They afterwards returned to the open court, and promulgated their judgment. If the judgment was given in favour of the complainant and the accused refused to obey it: the complainant paid an ox to the elders and asked them to enforce their judgment by allowing him to fight the accused, and the elders gave their consent.

Relatives of both parties took part in the fight with bows and arrows. The party which conquered pillaged the property of the defeated and took their relations as slaves. The defeated party could redeem their relations with cattle etc.

2. *Anapigwa Chiutsi*. (To be beaten by the whole country). If the complainant was weak and could not fight the accused single-handed or with his relatives, he paid one ox to the elders and *Wangambi* and invoked their help. The elders and *Wangambi* collected all the people of their villages and attacked the accused whose property was looted and his children taken as slaves. No compensation was made for a person killed in the fight. The property looted and persons captured in the fight were the property of the individual captors and were not given to the complainant who retained what he looted himself.

COMPENSATION.

For the murder of a person.—For a corpse (*Kimba*): One free man and one free woman (compensation is called *Kore*).
(A niece and a nephew were paid).

Excusable homicide (*zani*—accident).—For a corpse—two slaves or five cattle or fifty goats. If the accused had no property or slaves he paid his two nephews or nieces or one of each. If he had none he was enslaved himself.

Theft.—If a thief was caught stealing crops and was taken before the

Wangambi, they ordered him to pay one goat. The goat was killed and its meat distributed to the *Wangambi* and the complainant. If a thief was killed by the owner while stealing no compensation was paid for his corpse. Wadigo had a saying—"A pig pays with his body," i.e., a thief is like a pig that raids one's farm and, when found, pays with its body. *Mwivi ni nguluwe akaripa na mwiriwe.*

Every Mdigo had the right to kill a thief found stealing his property.

For killing any livestock a like animal had to be paid.

FEES FOR CIVIL CASES.

Wangambi and the elders charged fees—*madusi*. In a civil suit the parties concerned paid a goat each.

FEES FOR CRIMINAL CASES SUCH AS MURDER.

Both parties paid an ox each to the *Wangambi* and the elders.

In order to ensure payments judgment was not given by the council until the fees were actually paid. Wadigo say that in this way both parties were ignorant of the judgment and each party was anxious to hear it, and so paid fees at once.

WITCHCRAFT.

Witchcraft in the Digo country consists of poison which a wizard puts in food and gives to the person whom he intends to kill. He also goes in the night to his enemy's house and dances nude outside it. The effect of his magic dance disturbs the inmate of the house and makes him babble in his sleep.

If an Mdigo is suspected of witchcraft, the person who suspects him, owing to the death of one of his relations, reports him to the elders of the village. The elders call together all the elders of the neighbouring villages and two elders of each village go to a diviner. The diviner tells them to sit down in a circle or half-circle. The diviner then snuffs his medicine, and, holding the tail of an ox or buffalo circles round them. If one of them (elders' relations) is a wizard, the diviner drops the tail on his (the elder's) hips and tells him that one of his relations is a wizard and identifies him. The elders then return and arrest him as a wizard who was responsible for the deceased's death. If he denies they take him to a blacksmith to take oath. The blacksmith places a hot iron on the palm of his hand and he (the suspected man) recites:—"If I am a wizard let this hot iron burn my palm, if I am not it shall not burn me." If the hot iron does not burn him the process is repeated three times. The man who accused him of witchcraft is then fined three cattle (two cows and one ox). Two cows are paid to the suspected person and the ox is killed and eaten by the villagers. The three cattle killed are called *Mkomola usawi* i.e. "Remove the witchcraft from the

falsely accused person." If the accused's palm is burnt by the hot iron, he is beaten to death. But if his relations save him he is ordered to pay *Kore* (compensation for the murdered person), one free nephew and one free niece.

KILLING OF CHILDREN.

In the olden days Wadigo killed the following children:—

- (1) *Kigego*. — A child born whose upper teeth came out first. Its kinsmen threw it into the river to perish.
- (2) *Kisimbo*.— A child born with legs coming out first. It was killed in the same way as the former.

SLAVERY.

In the days of slavery and in accordance with the ancient custom, Wadigo had the right to sell for food their nephews, nieces, and children by concubines whenever there was a famine. They could also pay them as compensation for *Kimba* (corpse) if they (uncles) committed murder or homicide. Captives of war were also made slaves.

A slave could marry a free woman and was treated as a member of the family by his master.

If a slave wanted to marry, his master paid the dowry.

A slave could buy his own slaves: and some slaves were richer than their own masters. But when they died their slaves were inherited by their masters, and the master had the right to use his slave's slaves during the slave's lifetime.

He (the master) could marry his slave's daughter, and pay to the slave one or two goats and palm wine as dowry for her.

A slave owned his own farm and his master did not take it from him; but he had to cultivate his master's farm.

